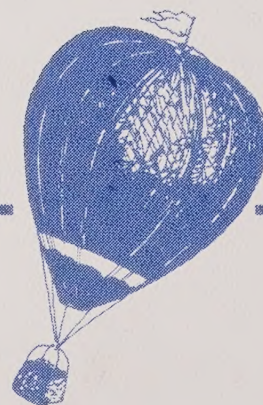


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PERRIS



GENERAL PLAN

THE UNIVERSITY OF CHICAGO

CITY OF PERRIS
GENERAL PLAN
OCTOBER 14, 1991

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Mayor Pro Tem Robert S. Fliehm
Councilwoman Judith C. Baitinger
Councilman Louis Borgia
Councilman Zac Henson

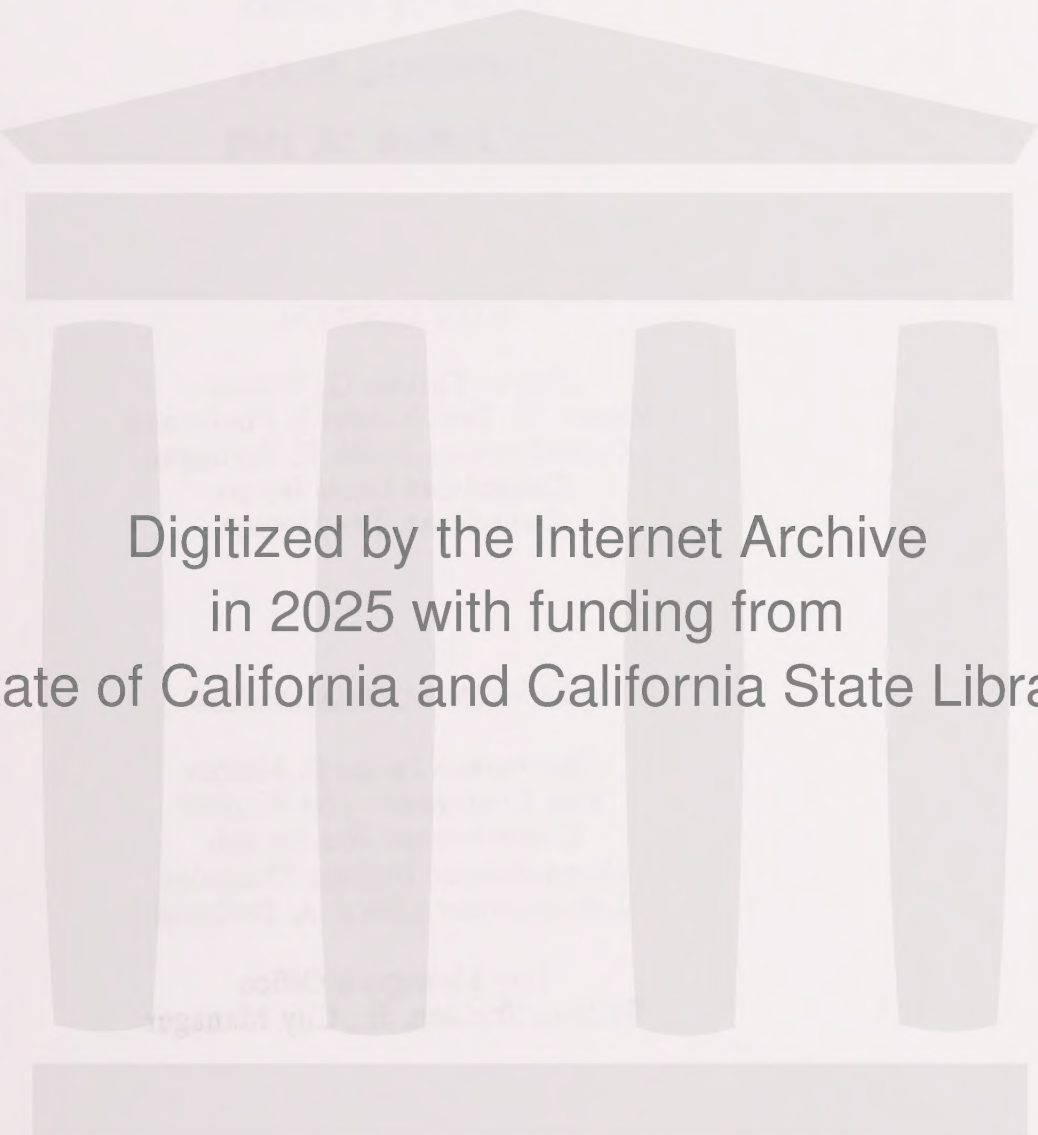
PLANNING COMMISSION

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Vice Chairperson Jim Wenker
Commissioner Joe Beeson
Commissioner Barbara Gonzalez
Commissioner Cheryl A. DeGano

City Manager's Office
William Sheldon, Jr., City Manager

PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

Michael N. Napolitano, Director



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**CONSULTANTS TO THE CITY
IN PREPARATION OF THE GENERAL PLAN**

COTTON/BELAND/ASSOCIATES, INC.
Urban and Environmental Planning
Pasadena and Encinitas

MOHLE, GROVER & ASSOCIATES
Municipal and Transportation Engineers

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Glossary

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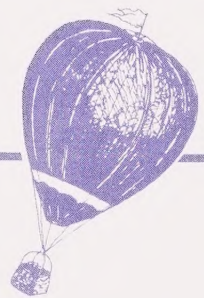
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PERRIS



GENERAL PLAN

CITY OF PERRIS

SUMMARY

OCTOBER 14, 1991

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SUMMARY

The narrative contained in this summary is intended to convey in a very abbreviated form the essence of the Perris General Plan. The adopted General Plan document should be referred to for the official wording and diagrams discussed in this summary.

Copies of the adopted General Plan and the official (and large size) maps are available for review in the Department of Planning and Community Development at the City offices.

INTRODUCTION

To plan is to prepare for the future. The General Plan for Perris provides the general long-term approach for maintaining and improving the quality of life in the community and the resources of the community, both man-made and natural.

The General Plan serves as a tool and frame of reference for use by City officials and citizens. Other public agencies use the Plan in determining the required capacity and location of public facilities and services needed to serve the City's population.

As its name implies, the Plan is "general" in nature and looks at the community as a whole. The Plan is not the same as the City's Zoning Ordinance and is not as specific in its definition of areas or as detailed in its requirements as zoning. The Zoning Ordinance is one of the tools the City uses to implement the General Plan.

GENERAL PLAN ELEMENTS

The General Plan is divided into six "elements" or chapters. The elements contained in the Plan are those required by the California Government Code Sec. 65302. The following

discussion focuses on the four elements - Land Use, Housing, Circulation, and Conservation/Open Space/Recreation - contained in the 1991 General Plan Update. The two elements not discussed in this section are Public Safety and Noise.

The **Land Use Element** designates the general distribution, location, and extent of various land uses throughout the City. The Element identifies standards for residential densities and non-residential intensities of development.

Basic goals and policies contained in the element deal with:

1. Establishing a balanced distribution of land uses while maintaining land use compatibility;
2. Manage growth and development to avoid adverse effects on the community;
3. Maintenance of community identity and quality neighborhoods; and

The Land Use Policy Map contained in the General Plan illustrates the location and extent of the various types of land use anticipated in the City in the future.

The mix of land uses, from residential through recreational, is summarized in Table LU-2 from the General Plan.

The 2010 population for the City is projected to be 90,823 persons. This number is based on the amount of residential area illustrated in the Land Use Policy map and the projected number of housing units in the City. Changes in family size will cause some variation from this number over time.

**TABLE LU-2
PROPOSED GENERAL PLAN LAND USE DISTRIBUTION 2010**

| LAND USE DESIGNATION | GROSS ACRES INSIDE CITY | GROSS ACRES OUTSIDE CITY | TOTAL PLANNING AREA | PLANNING AREA | | |
|--|-------------------------|--------------------------|---------------------|--------------------|---------------|---------------------------|
| | | | | DWELLING UNITS (a) | POPULATION | SQUARE FOOTAGE (000's)(b) |
| RESIDENTIAL | | | | | | |
| Residential Rural/ Agriculture | 842 | 18,563 | 19,405 | 1,087 | 3,170 | |
| Residential 4 | 2,429 | 1,207 | 3,636 | 6,108 | 17,816 | |
| Residential 7 | 3,634 | 719 | 4,353 | 9,751 | 28,445 | |
| Residential 14 | 2,258 | 646 | 2,904 | 13,009 | 37,947 | |
| Residential 22 | 82 | 0 | 82 | 1,181 | 3,444 | |
| COMMERCIAL | | | | | | |
| Com'l Neighborhood | 241 | 75 | 315 | | | 3,294 |
| Com'l Community | 2,263 | 451 | 2,714 | | | 37,837 |
| OFFICE | | | | | | |
| Prof. Office | 189 | 0 | 189 | | | 4,608 |
| INDUSTRIAL | | | | | | |
| Business Park | 650 | 54 | 704 | | | 7,360 |
| Light Industrial | 2,349 | 1,523 | 3,872 | | | 33,737 |
| General Industrial | 1,065 | 198 | 1,263 | | | 13,204 |
| OTHER | | | | | | |
| Public/Semi Public Facilities/ Utilities | 1,311 | 66 | 1,377 | | | 4,798 |
| Parks/Recreation Natural/Open Space | 2,196 | 1,914 | 4,110 | | | 1,624 |
| Transportation Corridors | 390 | 226 | 617 | | | 0 |
| Total (c) | 19,899 | 25,642 | 45,541 | 31,136 | 90,823 | 106,462 |

- (a) Represents 70 percent of total land area. Residential 22 represents 100 percent of land area.
 (b) Based net acreage which is derived from 80% of gross acreage of commercial industrial, public/semi-public and residential categories
 (c) Based on 2,917 persons/D.U. - Department of Finance
 (d) Fifty percent of the land area for business park, light, and general industrial land use designation areas is assumed to be developed for 2010 projections.

The **Housing Element** identifies the existing and projected housing needs of the community and establishes goals, policies, and programs for the conservation, rehabilitation and development of housing to meet the needs of all economic segments of the population. The Element is responsive to the requirements of State law regarding housing affordability and jobs housing balance.

The goals contained in the Element relate to:

1. Future expansion of the range of housing types to meet future needs;
2. Maintenance and enhancement of residential areas;
3. Provision for increasing homeownership opportunities;
4. Provision of support services to meet the needs of the City's low- and moderate-income residents; and
5. Recognition, in the provisions of housing, of the sensitive environmental character while meeting the social needs of the Community.

In addition to providing opportunities for housing development, keeping raw land costs, and thus housing costs, at affordable levels. An increase of approximately 19,000 housing units is expected over the 6,076 units in the City in 1988. Table H-4 from the Housing Element shows the distribution of housing units within the various density categories in the Plan.

The **Circulation Element** identifies the general location and extent of existing and proposed freeways, roadways, railways, transit routes, scenic highways, bikeways and trails.

Goals and policies contained in this element and which serve as a basis for the plan include:

1. Assuring the provision of a street system which will meet the needs of present and future residents for safe and efficient movement throughout the City;
2. Encouragement of the use of alternate transportation modes such as public transportation, bicycles, and trails;

**TABLE H-4
RESIDENTIAL DEVELOPMENT POTENTIAL
UNDER LAND USE PLAN
CITY OF PERRIS**

| Land Use Category | Existing DUs 6/88 | General Plan Buildout | | 20 Year Planning Period | | Served by Infra- structure by 1994 |
|----------------------|----------------------|--|--------------------------|----------------------------------|--------------------------|---------------------------------------|
| | | Plan Development Capacity (DUs) | Net Increase (DUs) | Expected Development (DUs) | Net Increase (DUs) | Net Increase (DUs) |
| Residential 2 du/ac | 60 | 67 | 7 | 47 | - | - |
| Residential 4 du/ac | 548 | 5,830 | 5,282 | 4,081 | 3,533 | 930 |
| Residential 7 du/ac | 1,171 | 11,629 | 10,458 | 8,140 | 6,969 | 2,796 |
| Residential 14 du/ac | 3,543 | 14,453 | 10,155 | 10,117 | 5,819 | 5,309 |
| Residential 22 du/ac | 755 ^(a) | 1,181 ^(b) | 1,181 | 1,181 | 1,181 | 1,181 |
| TOTAL | 6,076 | 33,160 | 27,083 | 23,566 | 17,502 | 10,216 |

(a) Reflects individual residential parcels developed at densities of 15 units/acre and above. Under the Land Use Plan, these parcels have for the most part been designated Residential 14.

(b) The Residential 22 designation is applied in the following for Specific Plans: New Horizons, New Perris, Green Valley and Park West. While the Specific Plans identify a total of 1,102 dwelling units to be developed under the Residential 22 designations, the Land Use Plan provides a slightly greater capacity for 1,181 units.

3. Separation of vehicular traffic associated with commercial, office, industrial, and agricultural uses from residential areas; and
4. Provision of suitable off-street parking to increase overall efficiency of circulation system.

The designation of streets within the community to serve as the backbone of the circulation system is illustrated in Figure C-1 in the Circulation Element.

The **Conservation/Open Space/Recreation Element** is concerned with the preservation and use of the City's natural resources and open space areas. The element also addresses the City's park system and includes a park enhancement plan.

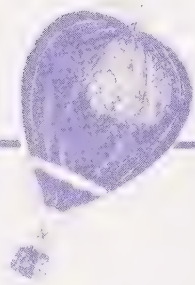
Primary goals and policies contained in this element relate to:

1. Protection and conservation of water resources;
2. Protection and conservation of earth resources;
3. Protection and conservation of plant and animal communities;
4. Minimizing energy supply demands through implementation of energy conservation measures;
5. Reduction of major losses of life and property through implementation of flood control measures;
6. Conservation of agricultural lands;
7. Reduction of air pollution through proper land use, transportation, and energy use planning;
8. Protection of open space areas to preserve natural resources; and
9. Developing and maintaining a balanced system of public and private park and recreational facilities.

THE CONSERVATION PLAN

The Conservation Plan contains measures to protect and conserve sensitive lands and resources through limitations on grading and through requiring special biological and archaeological surveys. The Open Space Plan establishes park standards for the City and provides for the parks and recreational needs of the planning area's population.

PERRIS



GENERAL PLAN

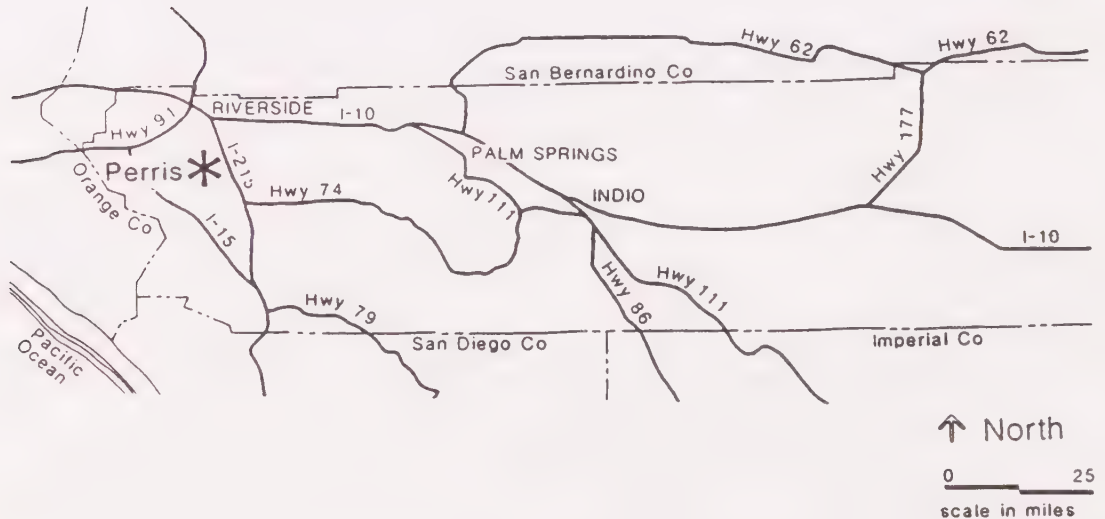
CITY OF PERRIS

INTRODUCTION TO THE GENERAL PLAN

OCTOBER 14, 1991

INTRODUCTION TO THE GENERAL PLAN

The City of Perris lies in the westerly portion of Riverside County, an area which is experiencing rapid growth (Figure I-1). During the 1980s, the City experienced an average annual population growth rate of about 13.5 percent. That rate is expected to increase to about 15.5 percent annually during the 1990s, resulting in a projected population of over 50,000 residents by the year 2000.



PLANNING FOR THE FUTURE

To prepare for expected growth, the City of Perris has prepared a General Plan which provides a long-term approach for maintaining and improving the community's natural and man-made resources. The Plan serves as a tool and frame of reference for use by City officials and citizens, as well as other public agencies that are responsible for determining the required capacity and location of public facilities and services needed to serve the City's population.

PURPOSE OF THE GENERAL PLAN

California State law requires for each city and county to adopt a comprehensive, long-term general plan for its own physical development. In essence, a city's general plan serves as the blueprint for future growth and development. As a blueprint for the future, the plan must contain policies and programs designed to provide decision makers with a solid basis for land use related decisions.

The general plan must address many issues which are directly related to and influence land use decisions. In addition to land use, State law requires that the plan address circulation, housing, the conservation of natural resources, the preservation of open space, the noise environment and the protection of public safety (Section 65302 of the California Government Code). These issues are to be discussed to the extent that they apply to a particular jurisdiction. The general plan may also cover topics of special or unique interest to a city or county, such as economic development or urban design.

ORGANIZATION OF THE GENERAL PLAN

The Plan consists of the following six elements, or chapters, which together fulfill the State requirements for a general plan. The six elements are: Land Use, Housing, Circulation, Conservation/Open Space, Public Safety, and Noise. The 1991 update of the General Plan involves the first four of those elements. Table I-1 illustrates the relationship between the General Plan's six elements and the seven State-mandated elements. The City of Perris General Plan contains goals, policies and programs which are intended to guide land use and development decisions into the twenty-first century.

General Plan Organization

The General Plan for the City of Perris consists of text and maps. Several supporting documents prepared during the course of preparation of the General Plan include the Master Environmental Assessment, the Housing Technical Report, and the General Plan Environmental Impact Report (EIR). These documents provide substantial background for the General Plan.

**TABLE I-1
RELATIONSHIP OF PERRIS GENERAL PLAN
TO STATE-MANDATED ELEMENTS**

| PERRIS GENERAL PLAN ELEMENTS | STATE-MANDATED GENERAL PLAN ELEMENTS | | | | | | |
|------------------------------------|--------------------------------------|------------------------|--------------------|-------------------------|-----------------------|-------------------|------------------|
| | Land Use Element | Circulation Element | Housing Element | Conservation Element | Open Space Element | Safety Element | Noise Element |
| Land Use Element | X | | | | | | |
| Circulation Element | | X | | | | | |
| Housing Element | | | X | | | | |
| Conservation/Open Space Element | | | | X | X | | |
| Public Safety Element | | | | | | X | |
| Noise Element | | | | | | | X |

The General Plan provides direction for the City's growth and development.

The Master Environmental Assessment (MEA), which describes the existing environmental setting in the City, serves as a reference document for future development which occurs within the City. The subject areas of the MEA follow the format prescribed by the California Environmental Quality Act (CEQA) guidelines.

The preparation of each general plan element was preceded by the identification of issues and constraints (i.e., existing conditions, infrastructure constraints, funding considerations) which were used to guide the formulation of general plan policy.

The General Plan Environmental Impact Report analyzes the potential environmental impacts of the policies and programs contained in the General Plan. The General Plan EIR differs from the MEA in that it focuses upon the specific impacts of the proposed policies, rather than the general environmental conditions existing in the City.

Element Organization

Each of the 1991 General Plan elements is comprised of four sections -- the Introduction, the Goals and Policies, the Plan, and the Implementation Program. The Introduction describes the purpose and focus of the element and also introduces other plans and programs outside of the General Plan which may be used to achieve specific General Plan goals.

The Goals and Policies section presents the City's long-term objectives for the subject area of each element. The goals and policies are arranged by issue or subject, and a brief description of philosophy or basis behind those objectives precedes each group of goals and policies.

For general reference, goals and policies may be defined as follows:

GOAL: A goal is a broad statement of purpose and/or direction.

Policy: A policy describes a more definitive course of action supporting the achievement of a goal.

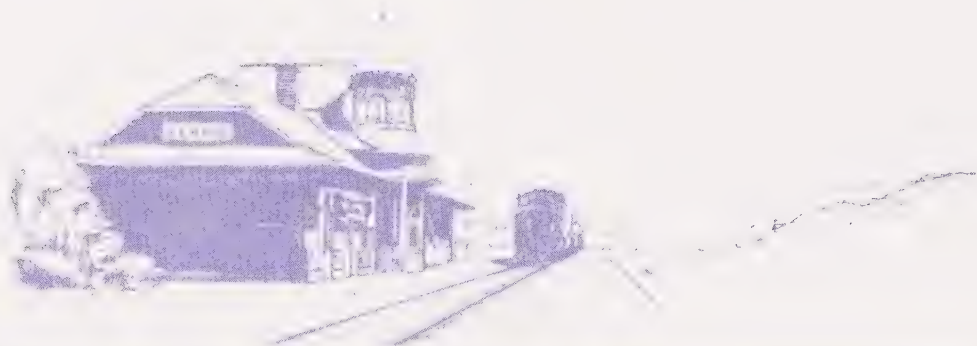
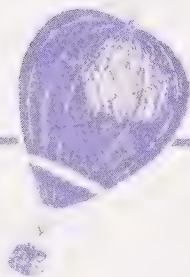
The third section of each element consists of the "plan," or the further definition of programs to be used to implement General Plan policy. For example, the Land Use Element contains a "Land Use Plan" which indicates the types and intensities of land use permitted city-wide. The "Circulation Plan" in the Circulation Element includes a Master Circulation Plan showing existing streets and intersections to be improved and new infrastructure provided to meet the circulation needs of City residents and those employed in or visiting the City. Wherever possible, each element contains maps, diagrams and tables to illustrate General Plan policy.

The Implementation Program is the final section of each element. This section identifies programs designed to achieve the goals and policies contained in the General Plan.

Citizen Participation

Citizen participation for the 1991 update of the Land Use, Housing, Circulation, and Conservation/Open Space Elements included a series of meetings with a Citizen's Advisory Committee, two public Open House sessions, and several joint meetings with the City Council and Planning Commission. All of these meetings were open to the general public. The Citizens Advisory Committee meetings focused on the development of goals and policies, as well as the development of alternative land use plans used during the Land Use Policy Map preparation phase. The Open House sessions provided general information about the General Plan update to the public and solicited input from the public on community issues.

PERRIS



GENERAL PLAN

CITY OF PERRIS

LAND USE ELEMENT

OCTOBER 14, 1991

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INTRODUCTION TO THE LAND USE ELEMENT

The Land Use Element serves as a guide for future development in the City and has a major impact on key issues examined in the other elements of the plan. For example, future development within certain areas of the City will affect local roadways, as discussed in the Circulation Element, while future residential development will affect policies and programs described in the Housing Element. Land use policy will also have a bearing on a large number of issues in the remaining elements, including those concerned with conservation and open space.

PURPOSE OF THE LAND USE ELEMENT

The City of Perris, in its desire to create a modern community consisting of orderly development, intends to achieve a number of objectives through the implementation of goals and policies contained in this Element. The objectives include:

- Provide a balance of land uses within the planning area to ensure that the residential population is served adequately by public, commercial, and employment-generating land uses.
- Create development within the planning area which would distinguish Perris from other cities and the region in general.
- Manage growth to maintain the "quality of life" in Perris and ensure that future development is supported by adequate infrastructure and other public services.
- Identify opportunities for new development and redevelopment of the "Old Town" or Downtown area and I-215 corridor, including much underutilized land and inefficient parcelization patterns which discourage desirable development within that area.

- Reduce impacts to development within the northeasterly portion of the planning area due to aircraft noise and accident potential zones around March Air Force Base.
- Reduce potential flood hazards associated with the floodplains of the San Jacinto River and the Perris Valley drainage course, as well as the dam inundation area through appropriate distribution of compatible land use within affected areas.
- Reduce potential incompatibility between residential and agricultural lands within the planning area.
- Preserve and enhance the Perris Valley Airport, Old Santa Fe Railway Depot, and Orange Empire Railway Museum due to their significance as links to the cultural heritage of the Perris Valley.
- Utilize existing redevelopment plan areas within the central and northern portion of the City as a method of providing for the economic and aesthetic enhancement of Perris.

Through the use of text and diagrams, the Land Use Element establishes clear and logical patterns of land use as well as standards for future development. An important feature of this element is the Land Use Policy Map. This map, a copy of which is contained in the back pocket of the General Plan, indicates the location, density and intensity of development for all land uses city-wide. Finally, the goals and policies contained in this element establish a constitutional framework for future land use planning and decision-making in the city.

RELATED PLANS AND PROGRAMS

The scope and content of the Land Use Element are primarily governed by the General Plan Law and Guidelines and the Planning Zoning and Development Laws for the state. In addition, there are a number of other plans and programs that are considered in the formulation, adoption and implementation of land use policy. Relevant plans and programs are described below.

City Ordinances

The City's Title 19 of the Municipal Code provides additional development and performance standards for development of land uses/activities. The City intends to adopt a revised Zoning Ordinance, Title 19, following adoption of the General Plan Update. The revised Zoning Code will include the creation of additional zoning categories to correspond to the Land Use Element's land use designations. The revised Zoning Ordinance will serve as the primary implementation tool for the Land Use Element and the goals and policies it contains. A revised Zoning Map, consistent with the General Plan Land Use Policy Map, will also be adopted to identify the zoning categories applied to each parcel of land within the City. Together, the Zoning Ordinance and Map are used to identify the specific types of use, intensity and development standards applicable to given parcels or areas of land.

Regional Plans

Riverside County agencies have developed regional highway, recreation, and other plans which affect land use policy in the City. These regional plans include the following:

- Master Drainage Plan for the Perris Valley Area;
- County of Riverside General Plan;
- Stephens' Kangaroo Rat Habitat Conservation Plan; and
- Air Installation Compatible Use Zone (AICUZ) for March Air Force Base

Land use policy decisions for the northern and central portions of the City are affected by March Air Force Base. Interstate 215, one of the region's north-south transportation corridors, is also an important consideration in land use policy decisions for the City. The County of Riverside has responsibility for regional serving parks within the City's sphere of influence. The Kaban County Park and Wilderness area is located to the southwest of the City, within the City of Perris Sphere of Influence. Regional park and circulation plans are discussed in greater detail in the Circulation and Conservation/Open Space/Recreation Elements.

The Southern California Association of Governments (SCAG) is also responsible for much of the regional planning in Southern

California. SCAG has been preparing long range growth and development plans for the Southern California region since the early 1970s as part of the ongoing Development Guide Program. This program provides a framework for coordinating local and regional decisions regarding future growth and development. An important component of this process is the preparation of growth forecast policies at intervals ranging from three to five years.

The adopted growth forecast policies become the basis for SCAG's functional plans (transportation, housing, air and water) for the region. The population totals and growth distribution are used in planning the future capacity of highways and transit systems, quantity and location of housing, water supply, and siting and sizing of sewage treatment systems.

SCOPE AND CONTENT OF THE ELEMENT

The Land Use Element consists of both text and diagrams. The following section of this element titled "Land Use Goals and Policies" presents the City's general goals for the long-term growth and development of the community. These goals are defined further in the third section, the "Land Use Plan." The Land Use Plan consists of: 1) the General Plan Land Use Policy Map; 2) the land use policy consideration; and 3) the descriptions of the land use designation indicated on the policy map.

LAND USE ELEMENT GOALS AND POLICIES

The goals and policies contained in this element address preservation of major areas of the City, revitalization of others, and guidance of new development in those portions of the City presently undeveloped. The following goals and policies, and implementation measures focus on maintaining a balance between residential, commercial and industrial land use, promoting high quality development, and minimizing existing and potential land use conflicts.

BALANCED DEVELOPMENT IN PERRIS

By providing a broad range of housing and business opportunities, as well as institutional, recreational, and cultural activities, a balanced community can be achieved resulting in an enhanced overall living environment. Through designation of a range of uses, the City can achieve a balance of housing, which meets the housing needs of all income groups, a stable employment and tax base, and suitable recreational opportunities for residents.

In the past, the City has served as a trade and service center for the agricultural economy of the surrounding valley region. Immigration from Los Angeles and Orange Counties in the recent past has led to an increase in area population. With the escalation of housing costs within Los Angeles and Orange Counties, recent population increases have been due to those seeking affordable housing. Business and industry expansions have occurred as new neighborhoods to support them were created. Recreational activities, parkland and schools are being added to existing stock to service expanding resident needs.

GOAL 1.0: Provide a mix of land use types and insure their compatibility throughout the planning area.

Policy 1.1: Provide for a mix of land uses which meets the diverse needs of residents; offers a variety of employment opportunities; and capitalizes, enhances and expands upon existing physical and economic assets of the planning area.

Policy 1.2: Develop and maintain a system of land use designations and zoning districts which will provide locations for agricultural, residential, commercial, manufacturing, public, and open space uses, and which separates incompatible land uses.

Policy 1.3: Provide for patterns of land use which can be supported by existing and planned circulation, public facilities, and infrastructure system improvements in a manner that will preserve the city's fiscal capacity.

Policy 1.4: Provide for the development of a variety of high quality residential types and densities, that are in balance with the needs and desires of the people of the community.

Policy 1.5: Provide for a variety of industrial uses, including heavy manufacturing, light manufacturing, warehousing and distribution, transportation-related, and research and development.

Policy 1.6: Locate and group commercial and industrial uses which are oriented toward regional service/market areas to promote utilization of regional, rather than local, transportation facilities and development-supporting infrastructure.

Policy 1.7: Provide for the development of parks, schools and recreation uses which are located in close proximity to the population of the planning areas to be served.

Policy 1.8: Provide for the use of lands for agricultural production and processing.

Policy 1.9: Participate in the transition of non-conforming uses to conforming land uses within each land use designation category.

Policy 1.10: Ensure that adequate buffers, such as landscaping, setbacks, and walls, are provided between incompatible land uses.

Policy 1.11: Accommodate new higher density residential development adjacent to existing and planned commercial and light manufacturing areas, and adjacent to existing multiple family development, as well as principal transportation corridors.

Policy 1.12: Ensure that adequate lands are designated for neighborhood commercial uses adjacent to designated residential areas.

Policy 1.13: Plan for compatible land uses within the aircraft noise impact contours depicted in the Air Installation Compatible Use Zones (AICUZ) Report for March Air Force Base.

GROWTH MANAGEMENT

Environmental effects of development can be reduced by the proper distribution and phasing of growth. Identification of constrained or sensitive lands can assist in determining lands which are suitable for more intense development. Continued growth within the City will place additional demands on roadways, waterlines, sewer lines and other infrastructure. In order to accommodate projected growth, infrastructure will need to be expanded and maintained during future years.

A balanced community takes into account land uses which may be in conflict with one another. Flood prone areas, such as lands near the San Jacinto River and Perris Valley drainage course areas, require careful planning considerations. In accordance with State planning law, the land use element must identify areas subject to flooding. Annual review of flood prone areas must also occur. The City of Perris is a participant in the National Flood Insurance Administration program through the Federal Emergency Management Agency (FEMA). The U.S. Department of Housing and Urban Development (HUD), through the Flood Insurance Program, has identified and mapped those areas of Perris which are at risk of periodic flooding. Areas subject to flooding in the event of a 100-year flood, are identified in the Perris Master Environmental Assessment Document and the Conservation/Open Space/Recreation Element. The boundary is subject to change in that the encroachment is permitted within the floodplain fringe for developments with an elevation (lowest floor) one foot above the highest estimated flood level. Any development within FEMA-identified flood prone areas must be in accordance with Federal regulations.

GOAL 2: Manage growth and development to avoid adverse environmental and fiscal effects.

Policy 2.1: Manage growth so that its rate does not exceed the ability of the city and other service districts to provide a level of public facilities and services acceptable to the city.

Policy 2.2: Assist local school districts in the planning of educational facilities locations to provide educational opportunities for all residents.

Policy 2.3: Manage the outward expansion of all future development to maintain continuity with existing development, provide for orderly expansion of infrastructure and public services, minimize impacts on natural environmental resources, and preserve designated or potential open space.

Policy 2.4: Development within the planning area shall pay for the cost of providing necessary City public services and facilities to support that development in a timely manner, through the use of such mechanisms as benefit assessment districts, development fees, and maintenance districts.

Policy 2.5: Manage growth within the planning area to minimize disruption to important environmental resource areas, such as biological habitat, historical and archaeological sites, steep slopes, floodplains, geologically sensitive lands, mineral resources, agricultural preserves, and water recharge areas.

Policy 2.6: Provide for the use of planned unit developments which incorporate creative site design for new residential projects as a means of maintaining open space, reducing impacts to environmental resources, and avoiding environmental constraints.

Policy 2.7: Use the specific plan process for the development of large properties to ensure coordinated, comprehensive development and avoid problems of uncoordinated, incremental development.

Policy 2.8: Assess the fiscal impacts (service costs and revenues) of proposed major development projects to determine the actual cost of providing urban services.

Policy 2.9: Permit the development of childcare facilities coincident with new housing development.

Many unique recreational and cultural activities and opportunities are available to residents and visitors of Perris. Features within the area, such as Lake Perris and the Orange Empire Railway Museum, the Old Santa Fe Depot, the Perris Valley Historical Museum, and the Perris Valley Airport represent ties to the historically rich past of the region. These features also create part of the community's identity and therefore need to be considered within the context of future area land use plans. Natural features, such as rock outcroppings and tree rows, also contribute to the overall character and image of the City.

GOAL 3: Develop a community identity for the planning area.

Policy 3.1: Develop and maintain a land use plan for the planning area which proposes compatible land uses to create distinct, identifiable residential, commercial, manufacturing, public, and open space areas.

Policy 3.2: Plan the downtown area as a governmental, financial, entertainment and cultural center through the development of a specific plan incorporating a range of mixed land uses.

Policy 3.3: Enhance and preserve natural and man-made features, such as major roadways, rail lines, drainage courses, utility corridors, groups of rock outcroppings, and tree rows, to create boundaries, entryways, and separate identifies for different geographic portions of the planning area.

Policy 3.4: Maintain the character of existing older development having desirable image and design characteristics, such as historic significance, pedestrian scale and orientation, use of locally-occurring natural construction materials, unique architecture and native/indigenous landscaping.

Policy 3.5: Provide for the retention and maintenance of existing residential neighborhoods, commercial and manufacturing areas where preservation is a desirable and achievable objective.

Policy 3.6: Develop a distinctive community identity through the use of quality design for buildings, landscaping and other site planning features.

Policy 3.7: Provide for the needs of local residents and tourists alike by developing a positive image for the City through creation of a sense of place; creation of safe highway system; and enhancement of existing tourist/visitor amenities.

THE LAND USE PLAN

The Land Use Element describes the location and extent of future development in the City and identifies standards for that development. The geographic location of land uses are presented on the Land Use Policy Map which is a part of this Element. The Element focuses on specific characteristics of the City:

- 1) Undeveloped parcels of land within the City which will be the subject of most proposals for new development;
- 2) Existing development within the City and its long-term maintenance and preservation; and
- 3) Revitalization or redevelopment of existing development within the City where rehabilitation is necessary and/or desired.

LAND USE POLICY CONSIDERATIONS

A wide range of natural and man-made environmental factors are considered in the formulation of land use policy. Areas of special environmental significance, potential safety hazards, limitations of existing infrastructure, and the nature and character of existing development all have influence on land use policy.

Land Use Constraints and Resources

The Conservation/Open Space/Recreation Element identifies areas containing important ecological or natural resources. The Circulation Element describes roadway/transportation system capacities. These constraints, consisting of both natural and man-made elements will continue to influence long-range land use planning and are discussed in detail in the Master Environmental Assessment for the General Plan.

LAND USE DESIGNATIONS

Land use designations are necessary to identify indications of the type and nature of development that is allowed in a given location. While terms like "residential," "commercial" and "industrial" are generally understood, State general plan law requires a clear and concise description of the land use categories shown on the land use policy map.

The Perris Land Use Element provides for 13 land use categories or designations. Five of these designations are established for residential development, ranging from rural low-density single family to high density multiple family development. Two commercial designations, one office, three industrial and a Public/Semi-Public Facilities/Utilities category are included. A Parks/Recreation/Natural Open Space designation is also provided. Major transportation facilities, such as railways and Interstate 215, are included in the Transportation Corridor category.

Land Use Intensity/Density

In accordance with State general plan law, the maximum intensity/density permitted within a given Land Use designation is identified in this element and shown on the land use policy map. Table LU-1 lists each of the land use designations for the City and provides its corresponding measure of maximum intensity/density. The intensity/density listed represents the maximum allowable level of development on individual parcels of land, and the table also includes expected overall levels of development within each land use category on a city-wide basis. These expected overall levels of development represent an average intensity/density and are, therefore, less than the maximum allowed.

The land use designations, or categories, in this element are described in terms such as intensity and density. The term "intensity" refers to the physical characteristics of a building, such as height, bulk, floor area ratio and/or percent of lot coverage and its proportional relationship to the land on which it is situated. Intensity is most often used to describe non-residential development levels, but in a broader sense, is used to express overall levels of all development types within a planning area.

**TABLE LU-1
LAND USE DESIGNATIONS**

| Land Use Designation | Maximum Development Intensity/Density(a) | Average Intensity/Density(b) |
|--|--|------------------------------|
| RESIDENTIAL | DWELLING UNITS/ACRE | DWELLING UNITS/ACRE |
| Residential Rural/ Agriculture | 0.0-2.0 du/ac | 0.10 |
| Residential 4 | 2.0-4.0 du/ac | 3.00 |
| Residential 7 | 4.0-7.0 du/ac | 4.00 |
| Residential 14 | 7.0-14.0 du/ac | 8.00 |
| Residential 22 | 14.0-22.0 du/ac | 15.00 |
| COMMERCIAL | FLOOR AREA RATIO | FLOOR AREA RATIO |
| Com'l Neighbhd (CN) | .50:1 | .30:1 |
| Com'l Community (CC) | .75:1 | .40:1 |
| OFFICE | | |
| Professional Office (PO) | 1.0:1 | .70:1 |
| INDUSTRIAL | | |
| Business Park (BP) | .75:1 | .60:1 |
| Light Industrial (LI) | .75:1 | .50:1 |
| General Industrial (GL) | .75:1 | .60:1 |
| OTHER | | |
| Public/Semi-Public Facilities/Utilities (PF) | .5:1 | .10:1 |
| Parks/Recreation/ Open Space (OS) | .25:1 | .05:1 |

(a) Maximum allowable level of development on individual parcels of land.

(b) Projected overall levels of development on a city-wide basis.

For most non-residential development categories (commercial, industrial, office, business park, public facility, and recreation facilities), the measure of intensity known as "Floor Area Ratio" (FAR) provides the most convenient method of describing development levels. Simply stated, the floor area ratio is the relationship of total gross floor area, of all buildings on a lot to the total land area of that lot. For example, a 21,780 square foot building on a 43,560 square foot lot (one acre) yields a FAR of .50:1 as illustrated in Figure LU-1. As shown, a .50:1 FAR can yield a building of one story in height covering one half of the lot area, or a taller building which covers less of the lot and provides for more open space around the building.

Both residential density and non-residential intensity are based on the concept of net acreage, which is defined as that portion of gross acreage exclusive of street right-of-way and other public lands. Net acreage is assumed to be at 80 percent of gross acreage on a City-wide basis and a net acreage of land is assumed to equal 35,000 square feet for purposes of calculating density or intensity of General Plan land use.

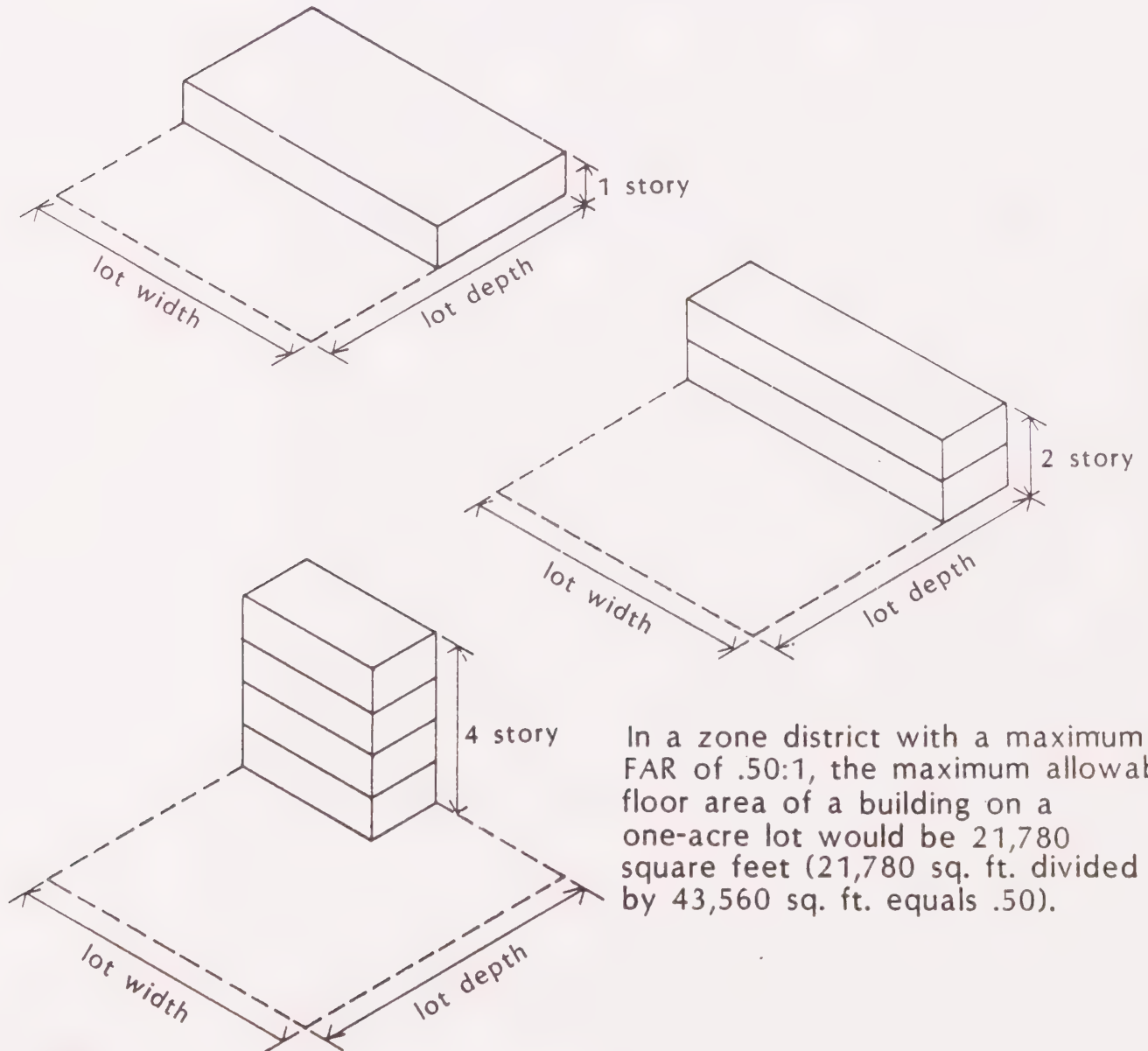
The term "density," in a land use context, is a measure of the population or residential development capacity of the land. Density is explained either in terms of number of dwelling units per acre (du/ac) or persons per acre and is often described as a range (i.e., 4-7 du/ac). For example, the density of a residential development of 100 dwelling units occupying 20 acres of land is 5.0 du/ac. Land use designation descriptions, shown on the Land Use Policy Map, identify the general types of uses allowed and their corresponding intensities or densities. These use descriptions will be further defined as specific uses within the City's Zoning Ordinance.

Residential Designations

Rural Residential/Agriculture: This residential and agricultural land use designation provides for the continuation of agriculture, animal keeping, and development of very low density single family dwellings or mobile homes, in areas where it is desirable to retain a rural lifestyle, characterized by large lots. This designation will permit the construction of as many as two detached single family dwellings per net acre of land. Other uses such as churches, schools, and child-care facilities, which are determined to be compatible with and oriented toward serving the needs of very low density detached single family dwellings, are also allowed.

$$\text{Floor Area Ratio (FAR)} = \frac{\text{Gross Building Area (All Floors)}}{\text{Lot Area}}$$

Possible Building Configurations for .50:1 FAR:



In a zone district with a maximum FAR of .50:1, the maximum allowable floor area of a building on a one-acre lot would be 21,780 square feet (21,780 sq. ft. divided by 43,560 sq. ft. equals .50).



P · E · R · R · I · S

Figure LU-1
Floor Area Ratio Defined

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Residential 4: This residential land use designation provides for the development of low density detached single family dwelling units. This designation will permit the construction of as many as four detached single family dwellings per net acre of land. Other uses such as churches, schools, and child-care facilities, which are determined to be compatible with and oriented toward serving the needs of low density detached single family dwellings, are also allowed.

Residential 7: This residential land use designation provides for the development of medium density detached and attached dwellings (duplexes, condominiums, town homes). This designation will permit the construction of as many as seven detached or attached single family dwellings per net acre of land. Other uses such as churches, schools, and child-care facilities, which are determined to be compatible with and oriented toward serving the needs of these residential uses are also allowed.

Residential 14: This residential land use designation provides for the development of higher density detached and attached single family dwellings, as well as multi-family dwellings. This designation will permit the construction of as many as 14 detached or attached single family or multi-family dwellings per net acre of land. Other uses such as churches, schools, and child-care facilities, which are determined to be compatible with and oriented toward serving the needs of higher density residential development, are also allowed. The Mildred Street Community Area, a special Residential 14 general plan study area, depicted in Figure LU-2, specifies which areas are to be developed as single family or multi-family (apartments).

Residential 22: This residential land use designation provides for the development of the highest density attached single-family and multi-family dwellings. This designation will permit the construction of as many as 15 attached single-family or multi-family dwellings per net acre of land, except within Specific Plan areas where as many as 22 dwelling unit per gross acre of land may be approved where a residential project provides additional amenities such as public open space, public parking, housing affordable to persons of low income or others deemed acceptable by the City. Other uses such as churches, schools, and congregate care and child-care facilities, which are determined to be compatible with and oriented toward serving the needs of higher density attached single family dwellings, are also allowed.

Commercial Designations

Commercial Neighborhood: This commercial category allows for limited scale commercial uses adjacent to residential areas to serve the day-to-day shopping needs of local residents. Examples of Commercial Neighborhood uses include: business offices, clothing stores, food and drug stores, furniture and appliance stores, hardware stores, restaurants, specialty retail, and sporting goods. Commercial Neighborhood projects typically occur on 5- to 10-acre parcels of land and include about 50,000 square feet or less of building floor area. Services offered include convenience shopping, consumer goods, and professional office categories, which may be accessed by automobiles and pedestrians. The maximum intensity of development permitted in this category will have a floor area ratio of up to .50:1.

Commercial Community: Commercial activities within this designation include retail, professional office, and service-oriented business activities serving the city-wide population. Community Commercial uses include the same types of uses permitted in Commercial Neighborhood areas, but may also support larger scale uses such as department stores, discount stores, furniture/appliance outlets, home improvement centers, entertainment centers, and subregional and regional shopping centers. Development generally occurs on 10 to 30 acres of land and can include 100,000 to 200,000 square feet of building floor area. Sites are typically located on arterial roadways to accommodate higher traffic volumes generated by their presence. In addition to being accessible to automobiles and pedestrians, Commercial Community developments may also be served by public transit. The maximum intensity of development permitted in this category is a floor area ratio of .75:1.

Office Designation

Professional Office: Professional Office uses include business activities associated with professional or administrative services. Activities can consist of corporate offices, cultural and community facilities, financial institutions, legal and medical services, and other similar uses which together represent major concentrations of community and employment activities. Professional Office development is typically located on arterial roadways for convenient automobile access and public transit service. Maximum development intensity for this category is a floor area ratio of 1.0:1.

Industrial Designations

Business Park: Business park uses include business/professional offices, light manufacturing, storage, warehousing/distribution, wholesaling, large-scale warehouse retail, automobile dealerships, service commercial activities, and public uses. Business Park areas are generally served by arterial roadways and freeways, providing automobile and public transit access. These areas are characterized as major employment concentrations. Maximum development intensity is .75:1.

Light Industrial: Light industrial uses include manufacturing, research, warehousing/distributing, and assemblage of non-hazardous products and materials, or retailing related to manufacturing activity. The maximum floor area ratio for land use in this category is .75:1.

General Industrial: General Industrial uses may support a wide range of manufacturing and non-manufacturing uses ranging from warehouse and distribution facilities to industrial activities. The maximum floor area ratio for land use in this category is .75:1.

Other Designations

Parks/Recreation/Natural Open Space: Parks/Recreation land use designation applies to all passive and active park or recreation areas whether private or public, in the City. Active recreation activities include community recreation facilities, equestrian centers, golf courses/driving ranges, indoor/outdoor athletic facilities, and public parklands. Passive activities include natural preserves, designated open space, museums, galleries, or similar cultural/historical centers. The maximum floor area ratio for land use in this category is .25:1.

Public/Semi-Public Facilities/Utilities: This designation includes a wide range of public quasi-public, and private uses such as school sites, government administrative offices and facilities, public utilities, institutes of higher learning, religious institutions, libraries, hospitals and cultural recreational activities and major transportation corridors. These uses are distributed throughout the city. The maximum floor area ratio for land use in this category will be up to .5:1.

Transportation Corridors: This designation consists of major highways and railway corridors. Interstate 215 and the AT & SF Railway right-of-way are prime examples.

DISTRIBUTION OF LAND USES

The distribution of planned city-wide land uses is described in Table LU-2 which identifies each land use designation, its associated land acreage, and the total land acreage for all planned land uses in the City. The table also provides estimates of the total number of residential dwelling units planned and the resulting population. For non-residential land uses, such as commercial, office, industrial, and community facility, estimates of building square footage are depicted.

Estimated residential dwelling units and estimated non-residential building square footage yields has been calculated on a net acreage basis, to account for City-wide public right-of-ways.

SPECIFIC PLAN STUDY AREA

The land use designations described above define the general types of uses allowed and their corresponding intensities or densities. In addition to these designations, State planning law provides methods and approaches to ensure proper planning for important sub-areas within the City.

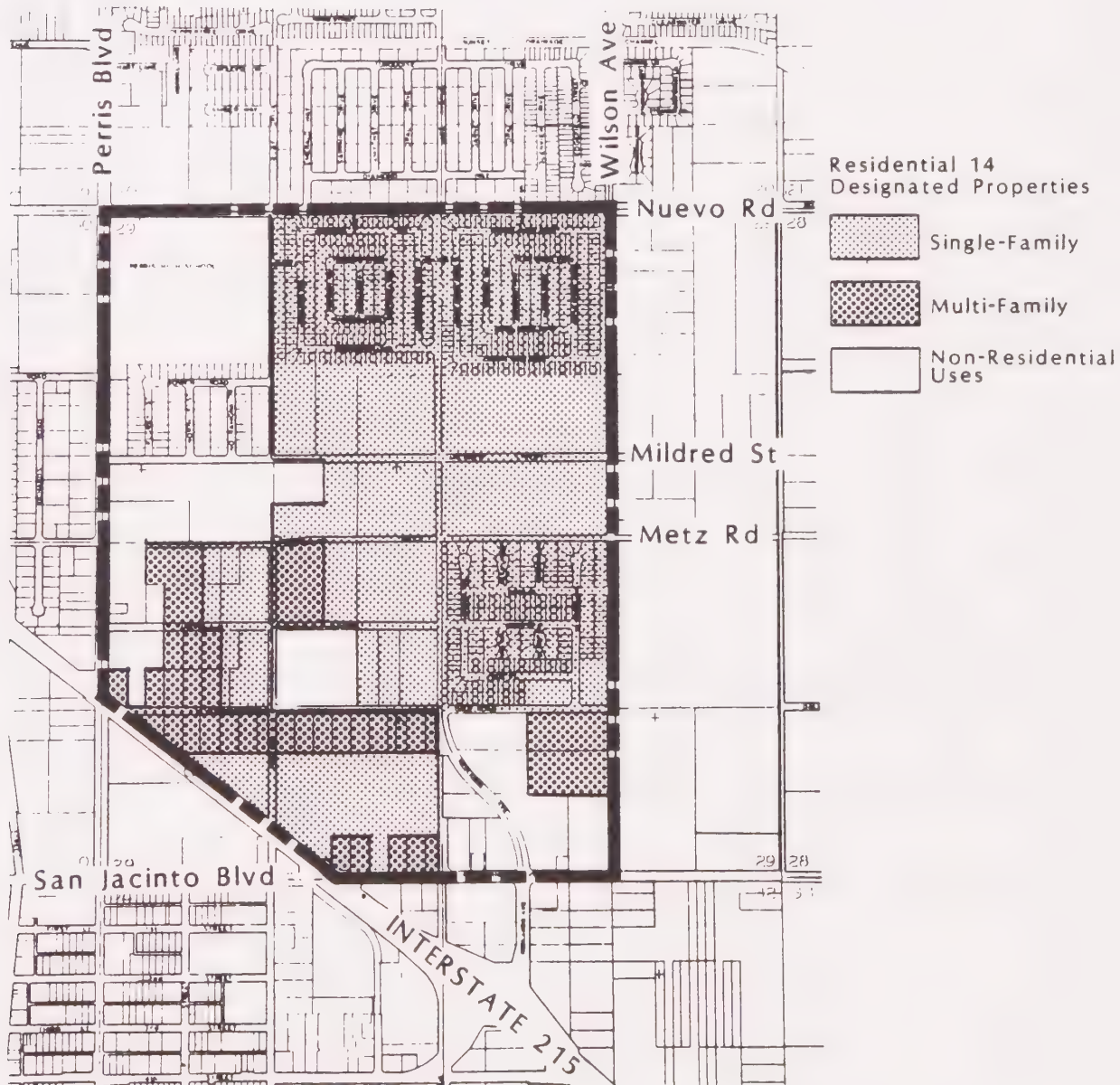
The Specific Plan is an important planning tool which can manage development and its associated impacts within areas of the City warranting special attention. Major residential projects of the City such as McCanna Ranch, May Ranch, New Horizons, and Green Valley, as well as New Perris which includes a town center concept, represent existing specific plans within the City.

MILDRED STREET COMMUNITY AREA

The Mildred Street Community Area (MSCA) is a special study area which was analyzed during the General Plan Update. It is located south of Nuevo Road, west of Wilson Avenue, north of San Jacinto Boulevard and Interstate 215, and east of Perris

Boulevard. All Residential 14 designated properties within the MSCA are identified as appropriate for either single-family development (minimum lot size 4,500 square feet) or residential apartment development. Figure LU-2 identifies single-family development and multi-family development areas. The purpose of identifying residential development type in the MSCA is to ensure compatibility between existing and future residential development, as well as compatibility between non-residential use areas and residential developments.

Figure LU-2 Mildred Street Community Area



**TABLE LU-2
PROPOSED GENERAL PLAN LAND USE DISTRIBUTION 2010**

| LAND USE DESIGNATION | GROSS ACRES INSIDE CITY | GROSS ACRES OUTSIDE CITY | TOTAL PLANNING AREA | PLANNING AREA | | |
|--|-------------------------|--------------------------|---------------------|--------------------|---------------|---------------------------|
| | | | | DWELLING UNITS (a) | POPULATION | SQUARE FOOTAGE (000's)(b) |
| RESIDENTIAL | | | | | | |
| Residential Rural/ Agriculture | 842 | 18,563 | 19,405 | 1,087 | 3,170 | |
| Residential 4 | 2,429 | 1,207 | 3,636 | 6,108 | 17,816 | |
| Residential 7 | 3,634 | 719 | 4,353 | 9,751 | 28,445 | |
| Residential 14 | 2,258 | 646 | 2,904 | 13,009 | 37,947 | |
| Residential 22 | 82 | 0 | 82 | 1,181 | 3,444 | |
| COMMERCIAL | | | | | | |
| Com'l Neighborhood | 241 | 75 | 315 | | | 3,294 |
| Com'l Community | 2,263 | 451 | 2,714 | | | 37,837 |
| OFFICE | | | | | | |
| Prof. Office | 189 | 0 | 189 | | | 4,608 |
| INDUSTRIAL | | | | | | |
| Business Park | 650 | 54 | 704 | | | 7,360 |
| Light Industrial | 2,349 | 1,523 | 3,872 | | | 33,737 |
| General Industrial | 1,065 | 198 | 1,263 | | | 13,204 |
| OTHER | | | | | | |
| Public/Semi Public Facilities/ Utilities | 1,311 | 66 | 1,377 | | | 4,798 |
| Parks/Recreation Natural/Open Space | 2,196 | 1,914 | 4,110 | | | 1,624 |
| Transportation Corridors | 390 | 226 | 617 | | | 0 |
| Total (c) | 19,899 | 25,642 | 45,541 | 31,136 | 90,823 | 106,462 |

- (a) Represents 70 percent of total land area. Residential 22 represents 100 percent of land area.
 (b) Based net acreage which is derived from 80% of gross acreage of commercial industrial, public/semi-public and residential categories
 (c) Based on 2.917 persons/D.U. - Department of Finance
 (d) Fifty percent of the land area for business park, light, and general industrial land use designation areas is assumed to be developed for 2010 projections.

IMPLEMENTATION PROGRAM

IMPLEMENTATION MEASURES

Implementation measures for land use policy are organized around the tools available that bear a direct relationship to the realization of land use goals and policies - the City's zoning ordinance, subdivision and grading ordinances, growth management program, code enforcement, specific plans, and capital improvement projects and programs, and redevelopment.

Zoning Ordinance

The principal method by which jurisdictions implement land use policy regulating the location, type of use, and development character is the zoning ordinance. The Zoning Ordinance consists of two components: (1) a map which delineates the boundaries of zoning districts in which similar uses developed under similar standards are permitted, and (2) text which explains the purpose of the zoning districts, lists permitted and conditional uses, and provides standards for development. Title 19 of the municipal code contains the City's zoning ordinance. Following adoption of the General Plan update, the City will prepare a revised zoning ordinance consistent with the policies and standards contained in the General Plan. Adoption of the revised zoning ordinance and its associated map will provide a primary tool for implementing the Land Use Element.

Responsible Agency/Department: Department of Planning and Community Development.

Funding Source: City

Time Frame: 1991

Related Land Use Element Policies: 1.1 - 1.15, 2.1, 2.3-2.8 and 3.1-3.6.

Subdivision and Grading Regulations

Subdivision regulation is an exercise of the police power of a local jurisdiction to control the manner in which land is divided, while grading regulation controls the safety and aesthetic components of preparing and modifying landform to accommodate development. As is true with the zoning ordinance, these regulations must be consistent with the General Plan. The City's subdivision and grading ordinances will be reviewed to determine if it is necessary to amend the ordinances to reflect policy expressed in the Land Use Element.

Responsible Agency/Department: Department of Planning and Community Development/City Engineer/Public Works Department.

Funding Source: City

Time Frame: 1991

Related Land Use Element Policies: 2.3-2.5, 2.8 and 2.9.

Growth Management

The Growth Management Program for the City is comprised of four separate, but complementary implementation tools:

Riverside County General Plan Regional Growth Management Element (identifies planning/growth issues which cross jurisdiction boundaries county-wide such as public facility needs and environmental protection).

Locational adjustment to proposed development at City discretion where desired to avoid undesirable environmental impacts;

Environmental review under NEPA/CEQA to avoid or mitigate significant adverse environmental impacts associated with growth and development;

Fiscal impact analysis to estimate fiscal effects of proposed large scale development to avoid fiscally unsound development.

Responsible Agency/Department: All City Departments.

Funding Source: City/Private Development.

Time Frame: Ongoing

Related Land Use Policies: 1.1-1.15 and 2.1-2.9

Code Enforcement

Regulations within the City's zoning ordinance and other City ordinances must be enforced to be effective. The City has an active code enforcement program designed to achieve the desired level of regulation and expects to continue that program.

Responsible Agency/Department: Department of Planning and Community Development

Funding Source: City

Time Frame: Ongoing

Related Land Use Policy: 3.4, 3.5

Specific Plans

State law authorizes local jurisdictions to adopt specific plans for implementing their general plans in designated areas. The specific plan is intended to provide more precise descriptions of the types of uses permitted, development standards, and public infrastructure improvements for an area. They provide a mechanism for development of a unified design plan for public and/or private property within the plan area. The City presently contains specific plan areas such as: McCanna Ranch, May Ranch, Green Valley, New Horizons and New Perris. Other areas within the City may also be designated for Specific Plans in the future.

Responsible Agency/Department: All City Departments.

Funding: City/Property Owners

Time Frame: Ongoing

Related Land Use Policies: 1.1 -1.4, 1.8, 1.12, 1.13, 1.15, 2.8, 3.2, 3.3 and 3.4.

Capital Improvement Program

The City's Capital Improvement Program (CIP) will be reviewed in relation to the General Plan to ensure that plans for major expenditures are consistent with the areas designated for future growth, and the improvements identified in the Plan are included in the CIP. A finding of consistency with the General Plan must be made for each capital project of expenditure approved. This finding should be included in any actions to approve a budget for a specific improvement, as well as approval of the CIP.

Responsible Agency: Department of Planning and Community Development/Public Works Department

Funding: City

Time Frame: Annually

Related Land Use Element Policies: 2.1, 2.3, and 2.4.

Redevelopment

Redevelopment provides for needed public improvements by encouraging rehabilitation and repair of deteriorated structures, allows for land assembly, and promotes development in accordance with the General Plan. Redevelopment Project Areas within the City include:

Redevelopment Project Area 83-1 and North Perris Area 83-2; and the Ramona Expressway, Goetz Road, East San Jacinto, and West Fourth Street Sub-areas of Redevelopment Project 1987.

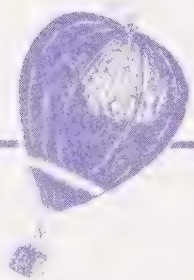
Responsible Agency/Department: City Manager/Redevelopment Agency/Department of Planning and Community Development.

Funding: Redevelopment Agency

Time Frame: Ongoing

Related Land Use Policies: 1.10, 1.15, 3.2, and 3.6

PERRIS



GENERAL PLAN

CITY OF PERRIS

HOUSING ELEMENT

OCTOBER 14, 1991

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INTRODUCTION TO THE HOUSING ELEMENT

Like many rural jurisdictions with a surplus of available land, Perris experienced dramatic housing growth during the 1980s. According to the State Department of Finance, the City's housing stock increased by 124.6 percent between April 1980 through January 1989. By comparison, Riverside County as a whole experienced a growth rate of 49 percent.

While the City has experienced a significant amount of growth during the decade, the composition of the housing stock (single- versus multi-family) has undergone minimal change. Due to the substantial amount of available and affordable land in the City for single-family development, future residential development in Perris can be expected to consist largely of single-family tract homes.

PURPOSE OF THE HOUSING ELEMENT

The Land Use Element is concerned with housing in a spatial context while the Housing Element identifies housing programs aimed at meeting the identified housing needs of the City's resident population. This Housing Element contains goals and policies which are primarily concerned with the location and density of new housing. Other concerns of the Housing Element include the identification of strategies and programs that focus on 1) housing affordability, 2) rehabilitation of substandard housing, 3) meeting the existing demand for new housing, and 4) the conservation of the current housing stock. The Housing Technical Report provides background information and acts as a supporting document for the Element.

Housing is a fundamental component of land use within a community necessary to support the resident population. Issues associated with housing in Perris include the following:

- Broad variation in the ability to pay for housing exists throughout the planning area;

- Certain groups of individuals (elderly, handicapped, large families, and others) have a more difficult time obtaining suitable housing;
- Housing in need of rehabilitation exists within the planning area;
- Public transportation and neighborhood commercial services are not always accessible to residential areas;
- Residential development in certain areas may not be compatible with surrounding non-residential development and/or natural features which act as a constraint to development.

The Housing Element establishes goals, policies and implementation programs to address these identified housing issues.

SCOPE AND CONTENT OF ELEMENT

The Housing Element consists of housing goals and policies for the City. Specific housing programs that will implement these goals and policies are identified in the section entitled Housing Plan which follows the Goals and Policies. Finally, the Housing Element summarizes the City's existing and projected housing needs identified in the Technical Data Report, providing the basis for targeting policies and programs to address these needs.

The State Legislature recognizes the role of local general plans, and particularly the housing element, in implementing Statewide housing goals to provide decent and sound housing for all persons. Furthermore, the Legislature stresses continuing efforts toward providing affordable housing for all income groups. The major concerns of the Legislature with regard to the preparation of housing elements are:

- Recognition by local governments of their responsibility in contributing to the attainment of State housing goals;
- Preparation and implementation of City and County housing elements which coordinate with State and Federal efforts in achieving State housing goals;

- Participation by local jurisdictions in determining efforts required to attain State housing goals; and
- Cooperation between local governments to address regional housing needs.

The State Department of Housing and Community Development sets forth specifics regarding the scope and content of housing elements prepared by cities and counties. Table H-1 summarizes State Housing Element requirements and identifies the applicable sections of the Perris Housing Element and Technical Data Report where these requirements are addressed.

CITIZEN PARTICIPATION

There was a considerable amount of citizen participation, both direct and indirect, in the formulation of Perris' housing goals and policies, and in the development of a Land Use Plan, which among other things, determines the extent and density of future residential development in the community.

As part of the update to the Perris General Plan, 35 community representatives volunteered to serve on a Citizens Advisory Committee to provide input at key stages in the planning program. Preliminary goals and policies for each of the updated General Plan elements were provided to the Citizens Advisory Committee and City Council/Planning Commission for review. Based on direction received from these groups, the goals and policies were revised for inclusion in the draft General Plan.

Public participation was also provided through open house workshops in which the public was invited to review the General Plan preferred land use alternative and to provide comments or ask questions of City staff and the General Plan consultants. An issues questionnaire was distributed at the open house workshop to solicit citizen feedback regarding the various planning issues facing the community. Based on the input received at these workshops, the Perris City Council and Planning Commission conducted a series of workshops to provide property owners an opportunity to submit alternative proposals to the preferred land use plan. The preferred land use plan was then revised based on Council and Commission's direction, and incorporated into the Draft Land Use and Housing Elements.

Finally, the public had an opportunity to review and comment on the Housing Element, as well as other General Plan elements, at public hearings held before the Planning Commission and City Council.

**TABLE H-1
STATE HOUSING ELEMENT REQUIREMENTS**

| REQUIRED HOUSING ELEMENT COMPONENT | REFERENCE |
|---|---|
| <p>A. <u>Housing Needs Assessment</u></p> <ol style="list-style-type: none"> 1. Analysis of population trends in Perris in relation to regional trends 2. Projection and quantification of Perris' existing and projected housing needs for all income groups 3. Analysis and documentation of Perris' housing characteristics including the following: <ol style="list-style-type: none"> a. level of housing cost compared to ability to pay; b. overcrowding; c. housing stock condition. 4. An inventory of land suitable for residential development including vacant sites and sites having redevelopment potential and an analysis of the relationship of zoning, public facilities and services to these sites 5. Analysis of existing and potential governmental constraints upon the maintenance, improvement, or development of housing for all income levels 6. Analysis of existing and potential nongovernmental and market constraints upon maintenance, improvement, or development of housing for all income levels 7. Analysis of special housing needs: handicapped, elderly, large families, female-headed households, and homeless | <p>Housing Needs Assessment-Demographic Trends</p> <p>Housing Needs Assessment-Household Characteristics</p> <p>Housing Needs Assessment-Household Characteristics</p> <p>Housing Needs Assessment-Household Characteristics</p> <p>Housing Needs Assessment-Housing Unit Characteristics</p> <p>Housing Opportunities-Residential Land Inventory</p> <p>Housing Constraints-Governmental Constraints</p> <p>Housing Constraints-Market Constraints, Environmental and Infrastructure Constraints</p> <p>Housing Needs Assessment-Household Characteristics</p> |

TABLE H-1
STATE HOUSING ELEMENT REQUIREMENTS
(Continued)

| REQUIRED HOUSING ELEMENT COMPONENT | REFERENCE |
|--|---|
| 8. Analysis of opportunities for energy conservation with respect to residential development | Housing Needs Assessment-Housing Unit Characteristics |
| B. <u>Goals and Policies</u> | |
| 1. Identification of Perris' community goals relative to maintenance, improvement, and development of housing | Housing Plan-Goals and Policies |
| 2. Quantified objectives and policies relative to the maintenance, improvement, and development of housing in Perris | Housing Plan-Goals and Policies |
| C. <u>Implementation Program</u> | |
| An implementation program should do the following: | |
| 1. Identify adequate sites which will be made available through appropriate action with required public services and facilities for a variety of housing types for all income levels | Housing Plan-Implementing Programs |
| 2. Program to assist in the development of adequate housing to meet the needs of low- and moderate-income households | Housing Plan-Implementing Programs |
| 3. Identify and, when appropriate and possible, remove governmental constraints to the maintenance, improvement, and development of housing in Perris | Housing Plan-Implementing Programs |
| 4. Conserve and improve the condition of the existing affordable housing stock in Perris | Housing Plan-Implementing Programs |
| 5. Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin or color | Housing Plan-Implementing Programs |

HOUSING ELEMENT GOALS AND POLICIES

This section of the Housing Element contains the goals and policies the City intends to implement to address a number of important housing-related issues. The following five major issue areas are addressed by the goals and policies of the Housing Element: 1) ensure that a broad range of housing types are provided to meet the needs of both existing and future residents; 2) ensure that housing is maintained and preserved; 3) provide housing support services; 4) ensure housing is sensitive to environmental and social needs; and 5) promote equal housing opportunity. Each issue area and the supporting goals and policies are identified and discussed in the following section.

HOUSING OPPORTUNITIES

The City wants to encourage the construction of new housing units that offer a wide range of housing types to ensure that an adequate supply is available to meet existing and future needs. The provision of a balanced inventory of housing in terms of unit type (e.g. single-family, multiple-family, etc.), cost, and style will allow the City to fulfill a variety of housing needs.

GOAL 1: Provide a wide range of housing types throughout the planning area to meet the existing and future needs of planning area residents, and provide equal housing opportunities.

Policy 1.1: Provide a variety of residential development opportunities in the planning area, in accordance with the Regional Housing Needs Assessment.

Policy 1.2: Encourage both the private and public sectors to produce or assist in the production of high quality housing to meet the needs of the handicapped, the elderly, large families, female-headed households, and homeless.

Policy 1.3: Promote the development of low and moderate income housing by allowing developers density bonuses or other financial incentives for providing units for low and moderate income residents and the elderly.

Policy 1.4: Avoid concentrating housing constructed expressly for low income households in any single portion of the planning area.

Policy 1.5: Encourage the development of residential units which are accessible to handicapped persons or are adaptable for conversion to residential use by handicapped persons.

Policy 1.6: Locate higher density residential development in close proximity to public transportation, services and recreation.

Policy 1.7: Monitor all regulations, ordinances, departmental processing procedures and fees related to the rehabilitation and/or construction of dwelling units to assess their impact on housing costs.

Policy 1.8: Encourage the use of energy conservation devices and passive design concepts which make use of the natural climate to increase energy efficiency and reduce housing costs.

Policy 1.9: Affirm a positive action posture which will assure that unrestricted access to housing is available in the community.

Policy 1.10: Provide opportunities for move-up housing in Perris.

MAINTENANCE AND PRESERVATION

The goal of housing preservation is to protect the existing quality and investment in housing and to avoid a degree of physical decline that will require a larger rehabilitation effort to restore quality and value. The housing conditions survey identified concentrated areas of deferred housing maintenance in the City's central core and outside the City along the westerly portion of Highway 74. Housing rehabilitation efforts will continue to be focused in this area to facilitate unit upgrading.

GOAL 2: Enhance the quality of existing residential neighborhoods in Perris, through maintenance and preservation, while minimizing displacement impacts.

Policy 2.1: Correct housing deficiencies through the development of a residential rehabilitation program.

Policy 2.2: Continue to utilize the City's code enforcement program to bring substandard units into compliance with City codes and to improve overall housing conditions in Perris.

Policy 2.3: Minimize the displacement impacts occurring as a result of residential demolition or condominium conversions.

Policy 2.4: Promote increased awareness among property owners and residents of the importance of property maintenance to long-term housing quality.

Policy 2.5: Encourage compatible design of new residential units to minimize the impact of intensified reuse of residential land on existing residential development.

Policy 2.6: Educate property owners on the benefits of home repair and remodeling using design and materials consistent with the historic character of the residence.

Policy 2.7: Identify existing neighborhoods within Perris based on common residential use patterns. Utilize identified neighborhoods as key elements in creating plans and programs to maintain or improve the character and quality of existing housing and housing environments.

HOMEOWNERSHIP

The option of homeownership has become a privilege in much of Southern California which is often not available to low income households or first-time home buyers. Unlike many communities, the majority of the for-sale housing in Perris is priced at levels affordable to moderate income and even some low income households. In order to further extend homeownership opportunities to lower income individuals, the City will support favorable home purchase options and alternative forms of homeownership.

GOAL 3: Provide increased opportunities for homeownership.

Policy 3.1: Provide favorable home purchasing options to lower income households, such as mortgage revenue bond financing and mortgage interest rate write-downs.

HOUSING SERVICES

In addition to policies designed to increase the availability and adequacy of the City's affordable housing stock, it is important that informational services are available to ensure the efficient utilization of the housing stock.

GOAL 4: Provide housing services to address the needs of the city's residents.

Policy 4.1: Coordinate housing services for seniors, such as in-home care and counseling for housing-related issues, to allow seniors to remain independent in the community.

Policy 4.2: Encourage shared housing as an option for seniors to share existing housing in Perris.

Policy 4.3: Encourage local lending institutions to establish a reverse mortgage program to allow income-poor seniors to remain in their homes.

Policy 4.4: Coordinate with local social service providers in Perris to address the needs of the City's homeless population. Permit through a conditional permit process the development of transitional housing in the City's residential zones in locations close to services and emergency shelters in commercial and industrial zones.

ENVIRONMENTAL SENSITIVITY

It is an on-going concern in the City to ensure that residential growth is sensitive to the environmental and social needs of the community. Development will be accommodated which is coordinated with available community resources and infrastructure, and which is designed to minimize impacts on the natural environment.

GOAL 5: Manage future population growth to prevent the overcrowding and over-saturation of existing community and environmental resources, and preserve the uniqueness of Perris as a desirable residential community.

Policy 5.1: Insure that new housing is sensitive to environmental and social needs.

Policy 5.2: Review and amend, as appropriate, existing residential zoning standards to require adequate open space and recreational amenities in new development.

Policy 5.3: Require residential projects to preserve significant natural land forms.



THE HOUSING PLAN

This section of the Housing Element summarizes the current and projected housing needs for the City. The Element also estimates the number of households that meet Federal or State criteria for special consideration when discussing specialized needs. Additionally, certain constraints which may discourage the construction of new housing are described. These constraints may include a wide range of factors that may increase the cost of new residential development. Finally, opportunities that will further the development of new housing are examined.

SUMMARY OF HOUSING NEEDS

A number of factors will influence the degree of demand or "need" for new housing in Perris in coming years. The four major "needs" categories considered in this Element include:

- Housing needs resulting from increased population growth, both in the City and the surrounding region;
- Housing needs resulting from the deterioration or demolition of existing units;
- Housing needs that result when households are paying more than they can afford for housing; and
- Housing needs resulting from the presence of "special needs groups" such as very large families, female-headed households, households with a handicapped person, and the homeless.

Population Growth

The 1989 population of Perris was estimated by the Department of Finance to be 15,166 persons, ranking it 11th among the 20 cities in Riverside County. The City of Perris transformed from a small agricultural town of 6,827 in 1980, to a center for single-family home development with a 1989 population over 15,000.



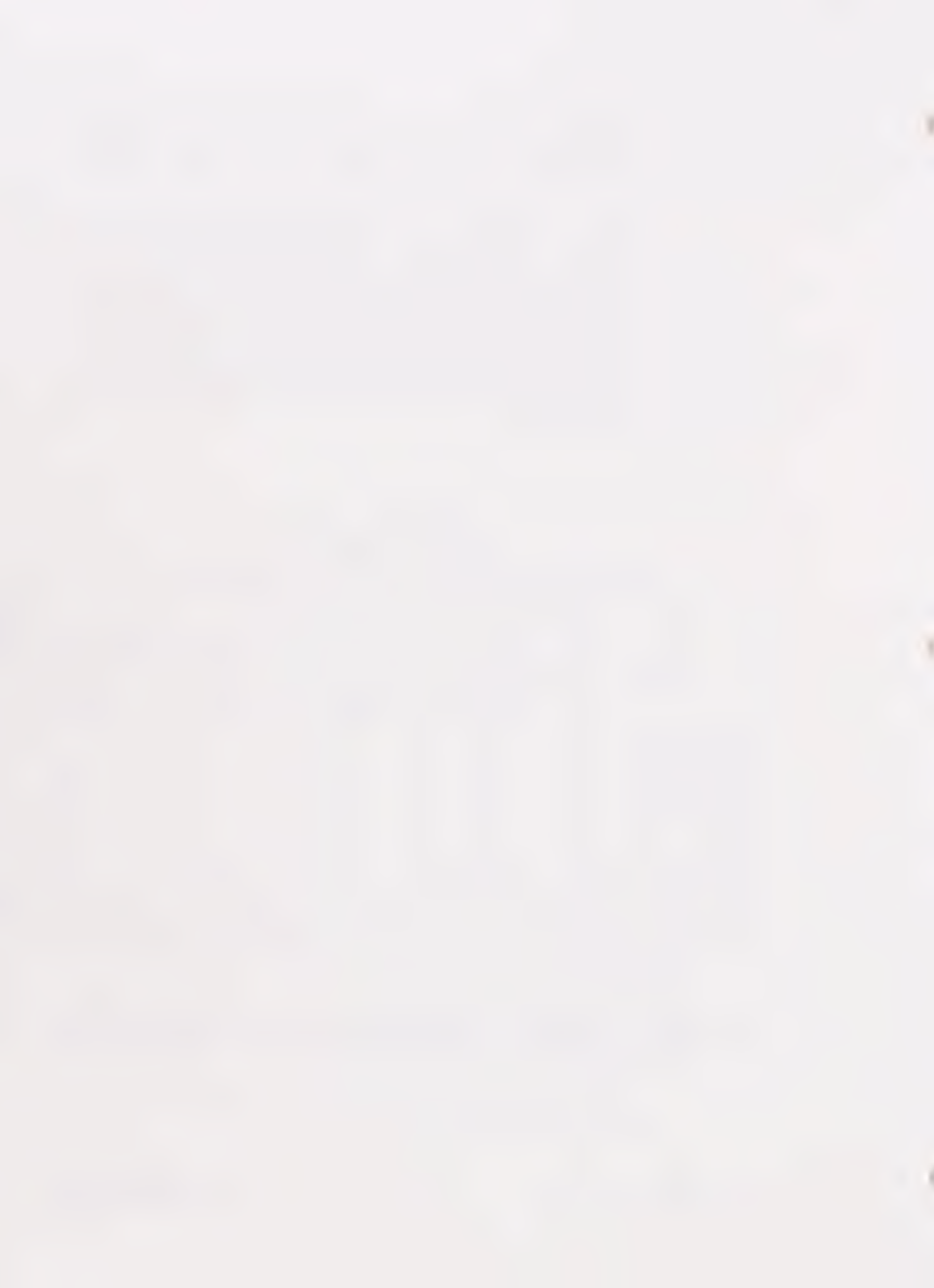
Of the surrounding areas (including Corona, Hemet, Lake Elsinore, Moreno Valley, and San Jacinto), only the cities of Moreno Valley and Lake Elsinore surpassed Perris' rate of growth during the 1980-1989 time period.

Future population growth in Perris will result primarily from new residential development attracting additional persons into the City. As discussed in the section on Housing Opportunities, the Perris Land Use Element provides for a net increase in 27,083 dwelling units within the City's present corporate limits, or a 445 percent increase over the City's July 1988 housing stock of 6,076 dwelling units (refer to Table H-2). This potential housing growth would support an estimated population increase of 81,561 persons in the City, for a total City population of nearly 97,000.

**TABLE H-2
CITY OF PERRIS
RESIDENTIAL CAPACITY OF LAND USE PLAN**

| LAND USE CATEGORY | GENERAL PLAN BUILDOUT | | 20 YEAR PLANNING PERIOD | |
|-------------------------|---------------------------------------|---|---|---|
| | Plan Development Capacity (DUs) | Net Increase Over July 1988 (DUs) | Expected Development ^(a) (DUs) | Net Increase Over July 1988 (DUs) |
| Residential 2 du/ac | 67 | 7 | 47 | - |
| Residential 4 du/ac | 5,830 | 5,282 | 4,081 | 3,533 |
| Residential 7 du/ac | 11,629 | 10,458 | 8,140 | 6,969 |
| Residential 14 du/ac | 14,453 | 10,155 | 10,117 | 5,819 |
| Residential 22 du/ac | 1,181 | 1,181 | 1,181 | 1,181 |
| TOTAL DUs | 33,160 | 27,083 | 23,566 | 17,502 |
| TOTAL POPULATION | 96,727 ^(b) | 81,561 | 68,742 ^(b) | 53,576 |

- (a) Development expected to occur during 1990-2010 planning period based on 70% of total General Plan buildout, except within the Residential 22 category where 100% buildout is anticipated within the 20-year planning period.
- (b) Population under General Plan Buildout/20 Year Planning Period is based on 2.917 persons per dwelling unit per Dept. of Finance estimates. Net increase is based on population under Plan buildout/20 year planning period minus existing January 1989 population.



The Perris General Plan is designed to guide the future growth and development of the community for a twenty year planning period through the year 2010. Based on current levels of development activity, an estimated 70 percent of the Plan's total development capacity will be realized over the twenty year time frame of the Plan. Within areas planned for higher density development (Residential 22), 100 percent buildout is anticipated by 2010 based on the location of the higher residential densities within the urbanized area or within specific plans. A total of 17,500 dwelling units are expected to be developed in the City during the twenty year planning period, generating a population increase of nearly 53,500. Table H-2 presents the break down of residential development and associated population increase anticipated in Perris through the year 2010.

Substandard Units

A windshield survey was conducted in July 1989 to evaluate the structural conditions of the City's housing stock. The survey focused on those areas of the City where housing deterioration was believed to occur as identified by City staff. The survey identified the following concentrations of substandard housing units: south of the A.T.&S.F. Railroad junction; south of 6th street between B and C streets; west of G street between 7th and 9th streets; and east of D street between 2nd and 3rd streets. Figure H-1 depicts the results of the housing conditions survey. Based upon Riverside County Housing Assistance Plan (HAP) estimates, approximately 330 (6.4 percent) housing units in Perris are in need of repair or replacement. Of the estimated 208 units suitable for rehabilitation, 90 (43 percent) are occupied by lower income households.

The Housing Element sets forth policies and programs to encourage the maintenance and rehabilitation of the City's housing stock. These policies include:

- Promotion of property maintenance among homeowners and landlords. (Policy 2.4)
- Utilize the City's code enforcement program to bring substandard units in compliance with City codes. (Policy 2.2)
- Provide financial assistance to income-qualified households for the rehabilitation of substandard and deteriorating housing. (Policy 2.1)

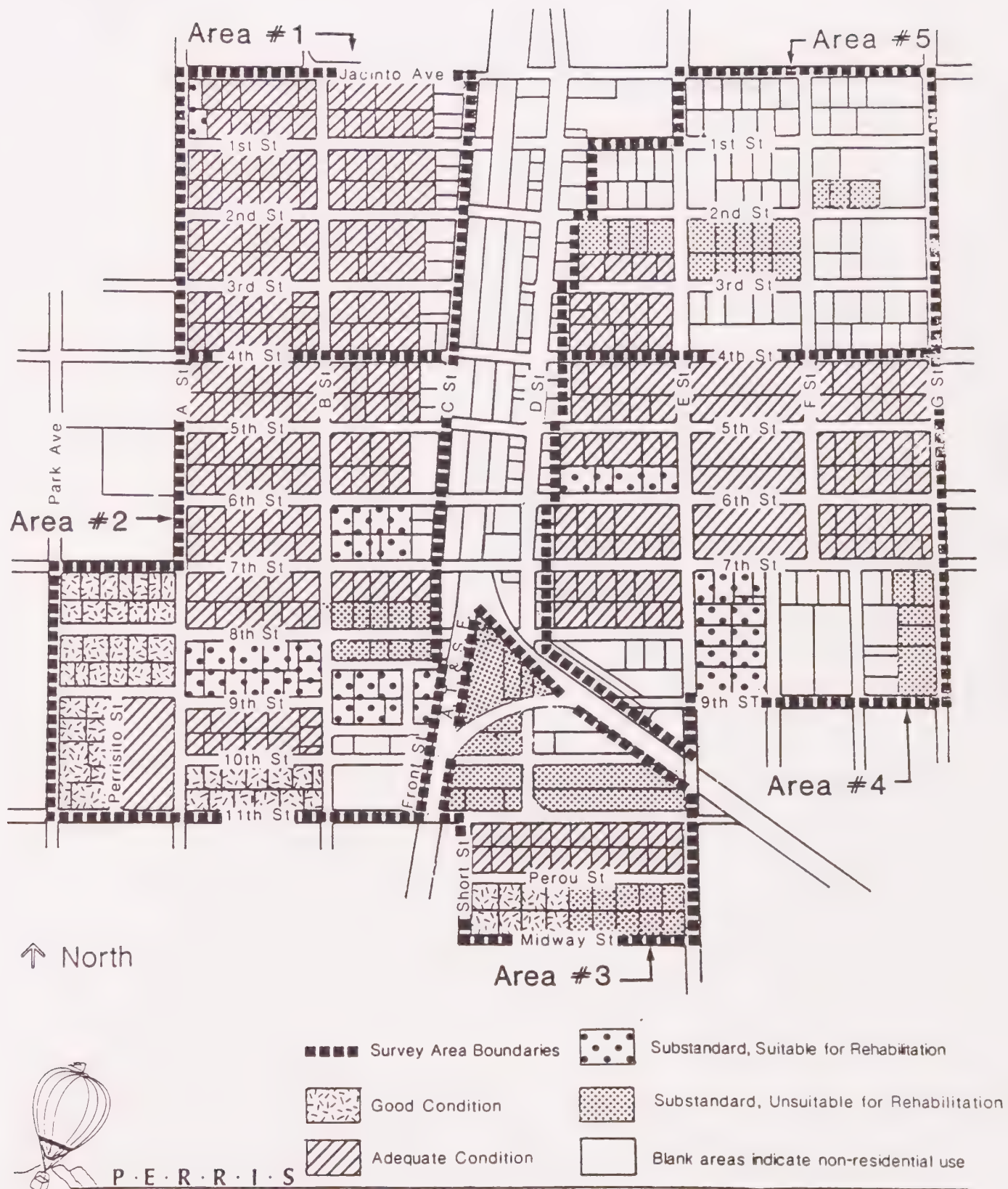


Figure H-1
Housing Conditions Survey
 OCTOBER 14, 1991

- Promotion of compatible materials in repair and remodeling consistent with neighborhood character. (Policy 2.6)

Affordability

State and Federal standards for housing overpayment are based on an income-to-housing cost ratio of thirty percent and above. Households paying greater than this amount will have less income left over for other necessities, such as food, clothing and health care. It is recognized, however, that upper income households are generally capable of paying a larger proportion of their income for housing, and therefore estimates of housing overpayment generally focus on lower income groups.

The Regional Housing Needs Assessment (RHNA) prepared by the Southern California Association of Governments (SCAG) identifies housing overpayment for the City's lower income households based on data from the 1980 census. (Lower income households are defined as households whose total gross income is less than 80 percent of the County median.) According to the RHNA, an estimated 35 percent (or 825) of Perris' lower income households were paying more than 30 percent of their income on rent or mortgage payments as of January 1, 1988. Of these overpayers, 482 are classified as Very Low Income and 343 are Low Income.

The distinction between renter and owner housing overpayment is important because, while homeowners may over-extend themselves financially to afford the option of home purchase, the owner always maintains the option of selling the home. Renters, on the other hand, are limited to the rental market, and are generally required to pay the rent established in that market. According to the RHNA, of the total 825 lower income households identified as overpayers, 569 were renter households and only 254 were owner households. This discrepancy is largely reflective of the tendency of renter households to have lower incomes than owner households.

Special Needs Groups

Certain segments of the population may have a more difficult time finding decent, affordable housing due to special circumstances. In Perris' these "special needs" households include the

elderly, handicapped persons, large families, female-headed households, and the homeless.

Elderly: The special needs of many elderly households result from their lower, fixed incomes, physical disabilities, and dependence needs. An estimated 2,015 elderly (65 years and over) resided in Perris in 1989, representing 13.3 percent of the total population. The proportion of elderly in the population can be expected to increase as persons between the age of 25 and 64 grow older (nearly 40 percent of the population). Escalating housing costs, particularly in the rental market, severely impact housing affordability for the elderly, who are usually on fixed incomes. Housing needs of the elderly can be addressed through the provision of smaller units, second units on lots with existing homes, shared living arrangements, congregate housing, and housing assistance programs.

The Housing Element establishes policies to encourage the development of housing for the elderly by offering density bonus and other zoning incentives. Additional policies encourage the provision of senior housing services, including shared housing and in-home care and counseling.

Handicapped: Physical handicaps can hinder access to housing units of traditional design as well as limit the ability to earn adequate income. 1980 Census data for the 92370 Zip Code area (of which Perris is a part) identifies 16 percent of all households as having at least one member with a serious lung disease, loss of sight or hearing, or mental retardation. Applying this proportion to the City's 1989 households translates to an estimated 826 households with one or more handicapped residents. Housing opportunities for these handicapped households can be maximized through the provision of affordable, barrier free housing. The Housing Element sets forth policies to implement State standards for the provisions of handicapped accessible units in new development.

Large Families: Large families (households with five or more members) are identified as a group with special housing needs based on the limited availability of adequately sized, affordable housing units. Large families are often of lower income, frequently resulting in the overcrowding of smaller dwelling units and in turn accelerating unit deterioration. According to Urban Decision System estimates, approximately 13.1 percent of the City's households in 1989 had five or more members, translating to 676 households. The housing needs of large households can

be addressed through the provision of affordably priced larger housing units. Much of the City's new housing construction consists of units with three and four bedrooms which will assist in providing housing opportunities to large families.

Female-Headed Households: Female-headed households tend to have low incomes, thus limiting housing availability for this group. In 1980, 11.7 percent of Perris' households were headed by a woman as reported in the City's Housing Element. Applying this percentage to the City's 1989 housing stock translates to an estimated 604 female-headed households. The majority of the female-headed households have dependent children under 18 years of age. Thus, providing housing opportunities for this group relates both to affordability and services related to the care of children.

The Housing Element sets forth policies to expand the supply of affordable housing and to encourage the provision of childcare facilities in Perris.

Farmworkers: As the Perris Valley undergoes urbanization, farming is declining. In 1980, the Census reported 1 percent of the Perris work force in the agricultural sector. Assuming this same proportion for 1989 translates to 51 farmworker households in Perris.

The special housing needs of farm workers stem from their low wages and seasonal nature of their employment. The City should cooperate with the Riverside County Housing Authority and the Riverside Community Action Agency to inform farm workers of programs which would help them to obtain better housing and training opportunities. The City can provide assistance through referral and information sharing with the above two agencies.

City employees, particularly Spanish speaking employees, should be encouraged to inform farm workers about available services. For example, the City Water Department could place notices of available services in the monthly billings, if available. Referral by Water Department staff could be made to the Social Service Agency handling Utility Relief.

The Building Inspector could make referrals of farm workers to proper Social Service agencies for weatherization and rehabilitation of homes. Furthermore, representatives of these agencies could conduct a training session of city staff to inform them of

programs available to farm workers residing in the City. Thus, the City could assist in developing more outreach and more farm workers could be assisted.

Homeless: Throughout the country, homelessness has become an increasing problem. Factors contributing to the rise in the homeless population include the general lack of housing affordable to those of very low income, increases in the number of persons whose incomes fall below the poverty level, reductions in public subsidy to the poor, and deinstitutionalization of the mentally ill. According to the City of Perris Police and Planning Departments, and Survival Ministries, an ecumenical organization in the City providing social services to the homeless, the City's homeless population number from 15 to 30 individuals, and are comprised of adolescents, elderly persons, and transients. The majority of these homeless individuals are single males. However, Survival Ministries and the Riverside County Welfare Department located in Perris also indicate the presence of numerous homeless families living in automobiles.

At present, the City of Perris does not have an existing emergency shelter within its jurisdiction. Based on the relatively few existing emergency shelters in the Perris area and the number of homeless persons who reportedly cannot be accommodated by the existing social service providers, there appears to be an unmet need for an emergency shelter in Perris. While the County's Cash A program assists families with finding transitional housing, there remains a significant portion of homeless adolescents and elderly persons. The City can help address these identified needs by providing supplementary funding to existing social service providers, and by encouraging the development of an emergency shelter. In addition, by providing decent and affordable housing opportunities, the City can help to curtail additional persons and families from becoming homeless.

HOUSING CONSTRAINTS

Actual or potential constraints on the provision and cost of housing affect the development of new housing and the maintenance of existing units for all income levels. Market, governmental, infrastructural, and environmental constraints to housing development in Perris are discussed below.

Market Constraints

The high cost of renting or buying adequate housing is the primary ongoing constraint to providing adequate housing in the City of Perris. High construction costs, labor costs, land costs, and market financing constraints are all contributing to decreases in the availability of affordable housing.

Construction Costs: The single largest cost associated with building a new home is the cost of building materials. In 1984, construction costs for a wood frame, 1,200 square foot, single-family home in Perris was \$47,400, comprising up to 60 percent of the sales price of a home. Between 1980 and 1988, overall construction costs rose over 30 percent, with the rising costs of energy a significant contributor. Construction costs for wood frame, single-family construction of average to good quality range from \$40 to \$55 per square foot, custom homes and units with extra amenities running somewhat higher. Costs for wood frame, multi-family construction average around \$42 per square foot, exclusive of parking.

Land: Land costs include the cost of raw land, site improvements, and all costs associated with obtaining government approvals. The price of land as a percentage of new costs has risen steadily since 1970, increasing state-wide from 21 percent to 27.8 percent in 1980. Although land is available and affordable in Perris, the cost of the land will ultimately reflect the burgeoning demand for housing in Riverside County. With growth trends projecting increased migration toward the inland counties during the coming decade, the pressures on land and housing in Perris will be exacerbated within a short time frame. These factors, combined with the shrinking supply of available land in the Southern California region and the number of undevelopable, environmentally protected areas of Perris, have accounted for a steady increase in raw land costs.

Labor Costs: Labor is the third most expensive component in building a house, constituting an estimated 17 percent of the cost of building a single-family dwelling. The cost of union labor in the construction trades has increased steadily since April 1974. The costs of non-union labor, however, has not experienced such significant increases. Because of increased construction activity, the demand for skilled labor has increased so drastically that an increasing number of non-union employees are being hired in addition to unionized employees, thereby lessening labor costs.

Financing: While interest rates have fallen more than 8 percent from their near 20 percent high in the early 1980s, they still have a substantial impact on housing costs which is felt by renters, purchasers and developers. The ability of lending institutions to raise rates to adjust for inflation will cause many existing households to overextend themselves financially, as well as returning to a situation where high financing costs substantially constrain the housing market. An additional obstacle for the first-time home buyer is the 10-20 percent downpayment required by lending institutions.

Interest rates are determined by national policies and economic conditions, and there is little that local governments can do to affect these rates. Jurisdictions can, however, offer interest rate write-downs and other subsidies to extend home purchase opportunities to lower income households. In addition, government insured loan programs may be available to reduce mortgage downpayment requirements.

Contact was made with one of the City's major lending institutions, Security Pacific Bank, to evaluate whether there are any underserved income groups in the community for new construction or rehabilitation loans. Under the Home Mortgage Disclosure Act (HMDA), lending institutions are required to disclose the number, amount, and location (by census tract) of mortgage and rehabilitation loans originated or purchased. Annual HMDA Reports for Security Pacific Bank were reviewed to evaluate whether residential financing is generally available in Perris' lower income census tracts, (tracts # 0427.04, 0428 and 0429). A total of 95 Home Improvement Loans were also initiated in each of these lower income census tracts proving that rehabilitation financing is readily available. HMDA Reports for the years 1986-1989 indicated single and multi-family mortgage loans had been issued in each of these census tracts, with a total of 65 loans originated during the four year period.

Profit, Marketing and Overhead: Developer profits generally comprise 10-15 percent of the selling price of single-family homes and slightly less for condominiums. However, in communities like Perris where the market demand and housing supply are both comparably high, developers will usually competitively price their units, and thereby realize slightly lesser margins of profit.

The increase in marketing and overhead costs have contributed to the rising housing prices. Inflation has spurred much of the

increase in marketing and overhead. Intense competition among developers has necessitated more advertising, more glamorous model homes, and more expensive marketing strategies to attract buyers.

Governmental Constraints

Housing affordability is affected by factors in both the private and public sectors. Actions by the City can have an impact on the price and availability of housing in the City. Land use controls, site improvement requirements, building codes, fees, and other local programs intended to improve the overall quality of housing may serve as a constraint to housing development.

Land Use Controls: The Land Use Element of the General Plan and corresponding zoning provides for a full range of residential types and densities dispersed throughout the City. Densities range from low density estate to 15 units per acre in areas designed for Multi-Family Residential development (22 units per acre under a specific plan). Additional densities can be achieved through density bonus incentives. With more than 40 percent of the City's potential buildout earmarked for residential uses, the Land Use Plan cannot be interpreted as a constraint to the provision of affordable housing in Perris.

Fees and Improvements: Various fees and assessments are charged by the City to cover the costs of processing permits and providing services and facilities, such as utilities, schools and infrastructure. Almost all of these fees are assessed through a pro rata share system, based on the magnitude of the project's impact or on the extent of the benefit which will be derived. None of the City's fees are excessive and are comparable to if not less than similar jurisdictions. Residential fees will continue to be monitored to ensure they do not unduly constrain the development of lower priced units.

Building Codes and Enforcement: The City of Perris' building codes are based upon the State Uniform Building, Housing, Plumbing, Mechanical, and Electrical Codes with minor amendments. These codes are considered the minimum necessary to protect the public health, safety, and welfare. The local enforcement of these codes does not add significantly to the cost of housing. The City does not have any type of growth control measures in place to limit residential development in its jurisdiction.

Parking requirements for single and multi-family residences are two spaces per unit, with one covered space. Mobile homes are required to have two parking spaces, and may locate these spaces in tandem alongside the coach. Landscaping is required in R-2 and R-3 zones in the front, rear and sideyards. Lot coverage requirements are a maximum of 40 percent of the site in R-1 zones, 50 percent of the site in R-2 zones, and 60 percent of the site in R-3 zones. These requirements do not unduly constrain the development.

Local Processing and Permit Procedures: The evaluation and review process required by City procedures contributes to the cost of housing in that holding costs incurred by developers are ultimately manifested in the unit's selling price. The review process in Perris is governed by three levels of decision-making bodies: the City Council, Planning Commission, and the Staff Review Committee (SRC) which is comprised of representatives from various City agencies. The City's review period is comparable, if not shorter than, other Riverside County jurisdictions, and does not unduly constrain the development of affordable housing. Nonetheless, Housing Element policies call for continued monitoring of departmental processing procedures to determine their impact on the ultimate cost of housing and to initiate appropriate changes to reduce costs.

Infrastructure Constraints

Adequate infrastructure and public services are necessary to accommodate future residential development. The deficiencies that presently exist as well as those projected in the future are primarily a result of recent growth and development pressures within the City, although increased consumption by existing customers is also a factor. The following sections discuss the availability of water, sewer, solid waste, and educational services to accommodate additional growth in Perris.

Water: The present source of water for Perris is mainly that imported water provided by the Eastern Municipal Water District (EMWD), with limited supplements from the Colorado Water System. EMWD has indicated adequate capacity is available to meet the City's projected water needs. However, many areas in the City such as the neighborhood west of A Street, will require water facility improvements, including the extension of service mains, the renewal of small pipelines, and the addition of storage facilities to accommodate future growth.

In order to facilitate anticipated growth, the City's single water pressure zone must be divided into three to meet fire flow conditions and residential requirements. In the case of new developments, water facilities will be financed by the project's developer on a pro-rata share basis through payment of fees or provision of necessary facilities. Mello-Roos Community Facilities Districts are utilized as a mechanism to levy special taxes within the district to finance needed infrastructure improvements. Bonds secured by such taxes may be issued for the same purpose.

Sewer: Most of the Perris study area is piped for sanitary sewer service although some properties in hillsides west of Perris are served via septic tanks. The Perris Valley Regional Water Reclamation Facility (WRF) operated by EMWD and located in Romoland treats wastewater generated in the study area. The capacity of the facility is one million gallons per day (MGD), although the plant's current flow (June, 1989) of 1.08 MGD is slightly above its official capacity. The plant is undergoing expansion to 2.0 MGD, with completion expected within 1990.

A major point of concern is the City's sewer pipes. Eighty percent of the lines have deteriorated as a result of the use of sulfuric acid to clean concrete and asbestos cement pipes installed in the 1940s. The City's Public Works Department has indicated that these pipes will require major rehabilitation in the future. The responsibility for providing sewer facilities for new developments belongs to the developer. Like water facilities, the developer finances sewer improvements through payment of development fees and/or construction of facilities. Mello-Roos Financing Districts and Developer Agreements are mechanisms utilized by the City to ensure the provision of adequate sanitary sewer improvements.

Solid Waste: Solid waste generation within the Perris planning area is managed by the Riverside County Waste Management Division under its 1985 Solid Waste Management Plan. The solid waste generated in Perris transported to either the Mead Valley Landfill or the Double Butte Landfill. At present, these two sites adequately serve the solid waste disposal needs of the City of Perris.

The majority of the City is served by the Mead Valley Landfill which is 240 acres in size. The 1988 average daily volume of waste was 375 tons per day, significantly higher than the volume cited in the 1985 Management Plan of 125 tons per day for July

1982. The service area for the Mead Valley landfill generates 10.65 pounds of solid waste per capita. In contrast, Riverside County averages 8.2 pounds per capita. According to the Riverside County Waste Management Division, the Mead Valley Landfill is expected to reach its capacity in 1999 based on a generation projection rate of 5,500 tons per year. The remaining capacity of the Mead Valley Landfill is 1.7 million tons.

The Double Butte Landfill is also 240 acres in size, with a total capacity of approximately 250,000 tons. The service area for the Double Butte Landfill generates 9.7 pounds of solid waste per capita, with an average daily volume of waste in 1988 was 612 tons per day. The landfill is projected to reach its capacity in 1994, based on current usage.

Education: Increases in the number of families with school-aged children have resulted in overcrowded schools in Perris. The Perris School District, Perris Union High School District and Val Verde Unified School District indicate that their schools are over capacity, with enrollment increasing yearly.

The Perris School District reports that it is restructuring its schools in an effort to balance enrollment. The Val Verde Unified School District has started construction on a new high school and middle school, with completion anticipated by 1991. With state school funding limited, the majority of funding comes from developer fees. As permitted under AB 2926, both school districts levy developer fees on new construction at a rate of \$1.58 per square foot for residential development.

Environmental Constraints

Portions of the planning area are exposed to a variety of environmental hazards and resources which may constrain the development of lower priced residential units. Although these constraints are primarily physical and hazard related, they are also related to the conservation of the City's natural resources.

Seismic Hazards: Like the entire Southern California region, the City of Perris is located within an area of high seismic activity. The primary seismic activity in the City is generated by movement of the San Jacinto, and Elsinore-Whittier Faults. Potential seismic hazards include ground ruptures, groundshaking, liquefaction, landslides, and seiches. Of these five, the most likely to occur is groundshaking. According to

Riverside County earthquake assessments, the northeast portion of the City has a moderately high potential for groundshaking should it experience an earthquake along the San Jacinto Fault. The western and southwestern portions have moderate groundshaking potential. Because no active or potentially active faults are known to exist in Perris, the City levies no particular restrictions on development as a result of seismic hazards.

Flooding: The Perris Valley has historically flooded in the form of overland flow which occurs in broad, flat, and undefined stream channels impacting urban and agricultural uses. The Riverside County Flood Control and Water Conservation District (RCFCWCD) constructed the Perris Valley Storm Channel to decrease the frequency of overland flow in the Perris Valley and to facilitate better drainage during high runoff. According to the City's Public Safety Element, flooding at the 100-year level within the flood plain would not impact the urbanized portions of downtown Perris, but can be expected to inundate areas along the Perris Valley Channel.

The City of Perris participates in the National Flood Insurance Administration program through the Federal Emergency Management Agency (FEMA), which provides federal flood insurance subsidies and federally financed loans for property owners in flood-prone area. The U.S. Department of Housing and Urban Development (HUD), through the Flood Insurance Program, has identified and mapped those areas of the Perris planning area which are at risk due to periodic flooding. These areas include the neighborhoods that border the Perris Valley Channel and the area southeast of the San Jacinto River Channel.

Dam Inundation Hazards: Dam inundation refers to the areas that would be inundated by floodwaters should a reservoir dam fail and release the water all at once. The Perris planning area lies within the potential inundation plain of three reservoirs: the Little Lake Reservoir in Hemet, Pigeon Pass Reservoir, and the Lake Perris Reservoir. Of the three, the latter poses the greatest threat in the case of dam failure.

Perris Dam is constructed of rock and earthfill, having been designed to withstand a major earthquake. The close proximity of the Perris Reservoir to the planning area makes the impact of a potential dam failure particularly hazardous. According to the City's Public Safety Element, in the event of a total failure of the Perris Dam, the intersection of Perris Boulevard and

Nuevo Road would be inundated within 20 minutes. Areas that would become flooded include much of the area south of Oleander Avenue, east of Interstate 215. Furthermore, all evacuation routes to the north, east, and southeast of the City could become impassable in the event of failure of the Perris Dam. Further recommendations, restrictions, and safety precautions are outlined in the City's Public Safety Element.

Natural Resources: Natural resources and wildlife can pose a constraint to development. In Perris, and in all of western Riverside County, the preservation of the Stephens' kangaroo rat habitat is potentially the most significant constraint facing large-scale housing development. The Stephens' kangaroo rat is a nocturnal rodent designated by the U.S. Fish and Wildlife Service as an endangered species. It thrives in flat grasslands and is native to the arid environment of western Riverside County. Although no kangaroo rat traces fall within Perris city boundaries, many traces have been detected on the outskirts of the City. In an effort to save the species from extinction, Stephens' Kangaroo Rat Joint Powers Authority (JPA) officials are in the process of developing a 30-square mile rat preserve, at an initial cost of \$103 million. To help pay for the cost, the JPA imposes a fee of \$1,950 per acre on developers. In addition to this fee, developers also continue to pay interest on loans as the County continues its efforts to implement a conservation plan. These additional burdens are costs which will likely be passed onto the homebuyer.

HOUSING OPPORTUNITIES

This section of the Housing Element evaluates potential additional residential development which could occur under the Perris General Plan, and the relationship of this growth to the City's share of regional housing needs.

Regional Housing Needs

State law requires jurisdictions to provide for their share of regional housing needs. The Southern California Association of Governments (SCAG) has determined the 1989-1994 needs for the City of Perris and has estimated the number of households which the City will be expected to accommodate during this period. Future housing needs reflect the number of new units needed in a jurisdiction based on households which are expected

to reside within the jurisdiction (future demand), plus an adequate supply of vacant housing to assure mobility and new units to replace losses. These needs were forecast by the 1988 Regional Housing Needs Assessment (RHNA), and are required to be addressed in the City's Housing Element.

According to the SCAG model, housing to accommodate 7,509 households will need to be added to the City's June 30, 1989, housing stock by July 1994 to fulfill the City's share of regional housing needs. Based on the distribution of regional income, this total is further divided among HUD's four income groups to identify the types of households to be provided for.

**TABLE H-3
CITY OF PERRIS
FIVE-YEAR REGIONAL HOUSING GROWTH NEEDS**

| INCOME CATEGORY | 1989-1994 HOUSING UNIT GROWTH NEED |
|---|---------------------------------------|
| Very Low (0-50% County median) | 1,306 units (17.3%) |
| Low Income (50-80% County median) | 1,813 units (24.2%) |
| Moderate Income (80-120% County median) | 1,771 units (23.6%) |
| Upper Income (over 120% County median) | 2,617 units (34.9%) |
| TOTAL | 7,509 units |

Source: Regional Housing Needs Assessment, Southern California Association of Governments, December 1988.

Residential Development Under Land Use Plan

The lack of vacant land suitable for residential development is not a problem in Perris. Based on the rate land is being annexed to the City, (approximately 2,000 acres of land were either annexed to the City or had annexations pending in 1989 alone), land is expected to continue to be plentiful well into the future. In addition to providing opportunities for housing development, the continued supply of developable land in Perris will assist in keeping raw land costs, and thus housing costs, at affordable levels.

An inventory of vacant land currently within the City limits indicates that there are 7,600 gross acres of vacant, residentially

planned land in Perris that could yield an additional 27,083 dwelling units. Buildout of these vacant acreages would represent a significant 445 percent increase above the City's existing housing stock of 6,076 dwellings. Based on current levels of development activity, an estimated 70 percent of the Plan's total development capacity will be realized over the twenty year time frame of the Plan. Within areas planned for higher density development (Residential 22), 100 percent buildout is anticipated by 2010 based on the location of higher residential densities within the urbanized area or within specific plans. A total of 17,500 dwelling units are expected to be developed in the City during the twenty year planning period, representing a 290 percent increase above existing residential development.

The Perris Land Use Plan provides for a mix of dwelling unit types and densities, including rural residential, low density single family units, mobile home subdivisions, medium density townhomes, and higher density apartments and condominiums. Table H-4 presents the distribution of dwelling unit densities provided for under the Land Use Plan, with the fifth and sixth columns representing the level of development anticipated to occur during the twenty year planning period.

Comparing the City's residential development potential of 27,083 dwelling units with the 7,509 dwelling units identified as Perris' regional housing need indicates the City's General Plan provides for a residential development capacity which adequately addresses regional needs. However, even with the rapid pace of development occurring in Perris in recent years, it is unlikely that the 7,509 regional share units will be developed within a five year period. The current rate of development is approximately 1,100 units per year, translating to 5,500 units over a five year period. Therefore, while adequate land is available in Perris to accommodate the City's regional share numbers developed by SCAG, it is doubtful that the market will support development of 7,509 dwelling units, or a 125 percent increase above existing during the July 1989-July 1994 period.

**TABLE H-4
RESIDENTIAL DEVELOPMENT POTENTIAL
UNDER LAND USE PLAN
CITY OF PERRIS**

| Land Use Category | Existing DUs 6/88 | General Plan Buildout | | 20 Year Planning Period | | Served by Infra- structure by 1994 |
|----------------------|----------------------|--|--------------------------|----------------------------------|--------------------------|---------------------------------------|
| | | Plan Development Capacity (DUs) | Net Increase (DUs) | Expected Development (DUs) | Net Increase (DUs) | Net Increase (DUs) |
| Residential 2 du/ac | 60 | 67 | 7 | 47 | - | - |
| Residential 4 du/ac | 548 | 5,830 | 5,282 | 4,081 | 3,533 | 930 |
| Residential 7 du/ac | 1,171 | 11,629 | 10,458 | 8,140 | 6,969 | 2,796 |
| Residential 14 du/ac | 3,543 | 14,453 | 10,155 | 10,117 | 5,819 | 5,309 |
| Residential 22 du/ac | 755 ^(a) | 1,181 ^(b) | 1,181 | 1,181 | 1,181 | 1,181 |
| TOTAL | 6,076 | 33,160 | 27,083 | 23,566 | 17,502 | 10,216 |

- (a) Reflects individual residential parcels developed at densities of 15 units/acre and above. Under the Land Use Plan, these parcels have for the most part been designated Residential 14.
- (b) The Residential 22 designation is applied in the following for Specific Plans: New Horizons, New Perris, Green Valley and Park West. While the Specific Plans identify a total of 1,102 dwelling units to be developed under the Residential 22 designations, the Land Use Plan provides a slightly greater capacity for 1,181 units.

In terms of development opportunities for lower income households, inexpensive land costs in Perris permit the market development of affordably priced housing at densities below those required in more urbanized communities. Over 40 percent (11,336 dwelling units) of potential residential growth is allocated to medium and higher density housing (Residential 14 and Residential 22), which can be priced within the range of affordability for very low and low income households. The Residential 14 land use category allows the development of medium and higher density detached and attached single family dwellings, as well as multi-family dwellings or mobile homes at a maximum density of 14 units per acre. The Residential 22 land use category will permit the construction of single-family attached and multi-family units at 15 units per acre, except within Specific Plan areas where up to 22 units per acre may be developed where certain amenities are provided, including housing affordable to very low and low income households. Recent development patterns in Perris exhibit extensive use of Specific Plans as a means of planning for residential develop-

ment, and suggest Specific Plans will continue to be adopted which incorporate dwelling unit densities of 20-22 units per acre.

In addition to areas designated Residential 14 and 22, downtown Perris offers another major opportunity for affordable housing development. The City is in the process of developing a Downtown Specific Plan which, among its other goals, will facilitate the development of affordable housing in the downtown. (Of particular benefit in developing higher density housing in the downtown is the current availability of infrastructure - see discussion below). The Specific Plan area generally coincides with the City's Redevelopment Project Area, and will be the target of approximately \$400,000 annually in redevelopment set-aside monies. The Agency is committed to spending this set-aside money to offer incentives including land write downs and rent subsidies to provide for the development of a minimum of 200 units of very low income housing in the downtown by mid-1994. The first priority project in the downtown will be for a senior housing facility to address the unmet needs of the City's low income senior citizen population.

Land which will be most likely to develop in the immediate future is that which is either currently served by public facilities and infrastructure or which will be served by infrastructure in the near future. In order to assess the projected availability of infrastructure to support future housing growth during the 1989-1994 period, the following assumptions are utilized. First, specific plans and other development projects which have received discretionary City approval are assumed to have infrastructure in place to support planned residential development by 1994. (More specifically, the New Horizons, New Perris and Park West Specific Plans are either in the process, or will in the near future, issue Mello Roos bonds to finance infrastructure improvements.) Secondly, land immediately surrounding the currently urbanized area is either currently served by infrastructure, or can be assumed to be served by 1994. Mello Roos Community Facility Districts and Developer Agreements are both currently being utilized in Perris as mechanisms to finance new public improvements. Aggregating the residential development potential among this acreage indicates the potential development of 10,216 dwellings which will be served by infrastructure by the year 1994 (refer to Table H-4). Thus, the City has adequate sites which are, or will be within the five year time frame of the Housing Element, served by necessary public facilities and infrastructure to meet its regional housing needs.

Housing Production in Comparison with Regional Housing Needs

The Regional Housing Allocation Model (RHAM) adopted by SCAG identified the following new construction need for Perris during the 1984-1989 period:

| Income Level | Number of Units |
|---------------------|------------------------|
| Very Low | 203 |
| Low | 282 |
| Moderate | 180 |
| Upper | 266 |
| Total | 930 |

During the five year period of the City's adopted Housing Element (1984-1989), a net increase of 1,619 single family, 562 multi-family, and 592 mobilehomes were added to the Perris housing stock, resulting in a total net increase in 2,773 dwelling units. Reflective of the residential building boom experienced in Perris, housing growth during the 1989-1994 period well exceeded the City's share of regional growth needs.

In terms of meeting the City's identified lower and moderate income housing growth needs, for-sale and rental costs in Perris are low enough that housing affordable to these income groups is provided through market-rate development. In 1989, very low income households could afford to spend up to \$402 monthly in housing costs (30 percent of \$32,200 regional gross income), low income households could afford up to \$644, and moderate income households could afford up to \$966. According to a 1989 survey of residential rental costs in Perris (refer to Table 17 in the Housing Element Technical Data Report), monthly apartment rents averaged around \$530, indicating the 562 units of multi-family housing constructed during the 1984-1989 period provides ample affordable housing opportunities for low income households. The City's very low income housing growth needs were addressed through the 592 mobilehomes added to the City (average mobilehome park space rents of \$265 in new parks) and through 200 units of Air Force housing occupied by air force personnel and their families who earn below the 1989 very low income limit of \$16,100. The rental survey also identified some one-bedroom apartments renting for below \$400 per month, thereby providing affordability to very low income households. Finally, virtually all new single-family construction

was priced well below \$108,000 in 1989 (refer to Table 15 in the Housing Element Technical Data Report), providing affordable homeownership opportunities to moderate income households.

In summary, the City was able to meet its regional growth needs by income category for the 1984-1989 period predominately through market rate construction. Housing assistance programs including rent subsidies, mortgage revenue bonds, and mortgage credit certificates were offered by the City and County in conjunction with new development to further enable the construction of affordable housing.

HOUSING PROGRAMS

The Housing Element section entitled "Summary of Housing Needs" describes the housing needs of the City's current and projected population, as well as the specific needs resulting from the potential deterioration of older units, lack of affordable housing for lower income groups, and special housing needs for certain segments of the City's population. The goals and policies contained in the Housing Element address the City's identified housing needs. These goals and policies are implemented through a series of housing programs.

Perris' overall housing program strategy for addressing its housing needs has been defined according to the following issue areas:

- Conserving and improving the condition of the existing stock of affordable housing.
- Providing adequate sites to achieve a variety and diversity of housing.
- Assisting in the development of affordable housing.
- Removing governmental constraints if necessary.
- Promoting equal housing opportunity.

Housing programs include both existing programs currently in use in Perris and new programs which have been added to address the City's unmet housing need. This section provides a description of each housing program, previous program accom-

plishments, and future program goals. The Housing Element Implementation Program located in the final section of the Element summarizes the future 5-year goals of each housing program, along with identifying the program funding source, responsible agency, and time frame for implementation.

Conserving and Improving Existing Affordable Housing

Housing rehabilitation includes major efforts to improve property and alterations aimed at converting the type or number of units. The goal of housing preservation is to protect the existing quality and investment in housing and to avoid a degree of physical decline that will require a larger rehabilitation effort to restore quality and value.

While the majority of Perris' newer housing stock is in good condition, much of the City's older housing exhibits deferred maintenance and signs of deterioration. The City's code enforcement program, combined with available single and multi-family rehabilitation assistance programs will work towards improving Perris' housing stock.

- 1. Home Improvement Program:** The Riverside County Community Development Department administers a Home Improvement Program to provide loans to eligible lower income families for necessary home repair and rehabilitation work. The Program provides low interest loans, deferred payment loans, and loans for mobilehome repair. Cooperating cities transfer Community Development Block Grant (CDBG) funds, and any other targeted funding, to the County for implementation of Home Improvement Programs in their jurisdiction. The County will tailor rehabilitation programs to meet the specific needs of cooperating cities.

Previous Accomplishments: Prior to 1983, funding for the Home Improvement Program was automatically taken "off the top" of each jurisdiction's annual CDBG allocation. Cities must now enter into a cooperative agreement with the County for administration of the program. The 1984 Perris Housing Element sets forth an action program for continued and expanded use of the County's Home Improvement Program. However, due to competing needs for limited CDBG funding, Perris has discontinued participation in the Home Improvement Program and has focused its CDBG

funds on needed infrastructure and community facility improvements.

Program Goals: The City of Perris receives approximately \$100,000 in CDBG funding on an annual basis. Based on the extent of housing deterioration present in Perris, the City will enter into a cooperative agreement with the County for implementation of the Home Improvement Program by the end of 1991. Perris will then commit to directing at least half of its CDBG monies towards the Home Improvement Program, with an annual assistance goal of 20 households.

2. **Senior Home Repair Program:** In addition to the Home Improvement Program, the County of Riverside also administers a senior home repair program. This program provides grants of up to \$250 to low income senior citizens for minor home maintenance needs. The grant covers the cost of materials; labor is provided at no cost.

Previous Accomplishments: The City's 1984 Housing Element sets forth a program action for expanded use of the Senior Home Repair program. However, since the Council on Aging transferred this program to Riverside County, Perris has not participated in this program. The County indicates they receive a large number of requests from Perris senior citizens requesting assistance with housing maintenance.

Program Goals: Perris will begin cooperating with the County for implementation of the senior home repair program in August of 1990. Based on the significant number of senior citizen households in Perris and the success of this program in other localities, a future annual assistance goal of 50 units has been established.

3. **Rental Rehabilitation Program:** In addition to the CDBG-funded rehabilitation programs, the County also operates a separately funded Rental Rehabilitation Program to encourage rehabilitation of substandard apartment buildings or single-family homes used as rentals. Through the Rental Rehab Program, the County offers up to a 50 percent deferred loan towards the total cost of a rehabilitation project, with the balance financed through a 6 percent interest rate loan. To qualify for a Rental Rehab subsidy, more than 70 percent of the building's tenants must be of low or moderate income.

Previous Accomplishments: The County Housing Authority indicates they receive a significant number of inquiries from property owners in Perris in relation to the Rental Rehab program. However, the requirement for 50 percent matching funds discourages many property owners from taking advantage of this program. A total of twelve units have been rehabilitated under this program in Perris since adoption of the City's 1984 Element.

Program Goals: This program has been effective in providing needed rehabilitation assistance to rental properties in Perris' older neighborhoods. In order to expand its usage, the City will contribute CDBG and/or redevelopment set aside funds as needed to assist property owners in obtaining funding for the 50 percent matching fund requirement. The goal of this program is to achieve rehabilitation of ten units annually.

4. **Code Enforcement:** The objective of the City's code enforcement program is to bring substandard housing units into compliance with City codes. Potential code violations are identified based on exterior windshield surveys by the City's code enforcement staff, and by complaints reported to the City.

Previous Accomplishments: Since adoption of the City's 1984 Housing Element, the City has expanded its code enforcement efforts to become more proactive in bringing structures into compliance with City codes. Perris has adopted the State Uniform Housing Code, and in 1987, adopted a Substandard Structure Ordinance to provide more specific housing code criteria. While the majority of the City's code enforcement cases are related to property maintenance issues, the City processes an average of one substandard structure case per month. Substandard properties which are declared a public nuisance by the Planning Commission and City Council are required to be brought up to code within a given period of time, or are abated by the City with the cost passed on to the property owner.

Program Goals: Perris' code enforcement program has been effective in reducing substandard housing conditions in the City. In order to minimize any financial hardship resulting from code enforcement activities, the City will begin informing property owners in violation of City codes of any rehabil-

itation assistance he/she may be eligible for in correcting code violations.

Provision of Adequate Housing Sites

A key element in satisfying the housing needs of all segments of the community is the provision of adequate sites for housing of all types, sizes and prices. This is an important function in both zoning and General Plan land use designations.

5. **Land Use Element/Zoning Ordinance:** Planning and regulatory actions to achieve adequate housing sites offering a range of housing types and styles include the Land Use Element of the General Plan and the Zoning Ordinance. A variety of residential types is provided for in Perris ranging in density from one to 22 dwelling units per acre, with higher densities achievable through density bonus provisions. The residential development capacity under the Perris Land Use Plan is adequate to meet the City's share of regional housing needs, which have been identified as 7,509 dwelling units through July 1994.
6. **Site Suitability Criteria:** Low and moderate income housing development should be located on sites which are not only physically adequate but also suitable for such development. These aims can be facilitated by having a set of "site suitability criteria" by which to judge the merits of potential project sites. These criteria will provide a yardstick for the City to identify and evaluate potential sites for low and moderate cost housing. Criteria for affordable housing will be integrated into the City's Zoning Ordinance.

In establishing this criteria, the City should consider those already set forth by other jurisdictions, including the State and Federal governments. One example of such criteria is the "Site Ranking and Environmental Evaluation" checklist of the California Housing Finance Agency (CHFA). That checklist provides a system for grading the suitability of sites with regard to the following:

- o Services available to the Site (e.g., public transportation, essential shopping facilities, educational facilities, etc.)
- o Neighborhood Characteristics (e.g., adjacent land uses, environmental considerations, noise levels, etc.).

- Physical Aspects of the Site (e.g., topography, off-site improvements, etc.).

The individual grades are combined into a composite "score" which enables identifying the best site for the proposed publicly assisted housing. These detailed CHFA criteria, along with others which are generally employed will be considered by the City for incorporation into the Zoning Ordinance. The City's intent in adopting and implementing the criteria is not to be more restrictive than other levels of government.

7. **Sites for Transitional Housing/Shelters:** Perris has an estimated homeless population of 15 to 30 individuals comprised of transients, adolescents, and elderly persons. The majority of these homeless individuals are single males, although homeless families living in automobiles are also represented. At present, the City of Perris has no existing emergency shelter within its jurisdiction. Based on the relatively few existing shelters in the Perris area and the number of homeless persons who reportedly cannot be accommodated by existing social service providers, there appears to be an unmet need for emergency shelter in Perris.

Program Goals: Housing Element policy calls for the City to coordinate with local social service providers, such as local churches, to address the needs of the homeless. In addition, the City will amend its Zoning Ordinance to permit the development of transitional housing in residential zones in locations close to services, and to permit emergency shelters in commercial and industrial zones, subject to a Conditional Use Permit. These Zoning Ordinance revisions will be made no later than 1991.

Assist in the Development of Affordable Housing

Unlike many communities in Southern California, residential land costs are still relatively affordable in Perris. This has fostered the market development of for-sale units which are affordable to moderate income households, and rental units which are affordable to low income households. The older, existing housing stock is within the financial means of an even greater range of households. Nonetheless, certain special need households in Perris such as the elderly and large families, cannot always afford market rate housing. The following

programs attempt to address the overall need for the development of affordable housing in Perris.

8. **Affordable Housing Development in Downtown Perris:** The City is in the process of developing a Downtown Specific Plan which, among its other goals, will facilitate the development of affordable housing in downtown Perris. The Specific Plan area generally coincides with the City's Redevelopment Project Area, and will be the target of approximately \$400,000 annually in redevelopment set-aside monies. The Agency is committed to spending this set-aside money to offer incentives including land write downs and rent subsidies to provide for the development of a minimum of 200 units of very low income housing in the downtown by mid-1994. The first priority project in the downtown will be for a senior housing facility to address the unmet needs of the City's low income senior citizen population.
9. **Section 8 Rental Assistance Payments/Housing Vouchers:** The Section 8 rental assistance program extends rental subsidies to low income families and elderly which spend more than 30 percent of their income on rent. The subsidy represents the difference between the excess of 30 percent of the monthly income and the actual rent. The voucher program is similar to the Section 8 Program, although participants receive housing "vouchers" rather than certificates. Vouchers permit tenants to locate their own housing. Unlike the certificate program, participants are permitted to rent units beyond the federally determined fair market rent in an area, provided the tenant pays the extra rent increment. The Reagan administration had proposed converting the Section 8 certificate program to a voucher system, which is expected to be implemented under the current Bush administration HUD Secretary.

Previous Accomplishments: The City of Perris contracts with the Riverside County Housing Authority to administer the Section 8 Certificate/Voucher Program. As of April 1990, a total of 245 households in Perris were receiving rent certificates. Over forty percent of these households were in one-bedroom units, reflecting the significant number of senior citizens in the City receiving rental subsidies. There are 425 Perris households on the waiting list to receive rent subsidies, nearly half of which are waiting for one bedroom units.

Program Goals: It is impossible to project the number of additional housing vouchers the City will actually receive from HUD. However, based on previous allocation levels, the City's goal is to secure an additional five rental subsidies per year. The City will facilitate use of the Section 8 program in its jurisdiction by encouraging apartment owners to list available rental units with the County Housing Authority for potential occupancy by tenants receiving Section 8 certificates.

10. **Density Bonus Program/Equivalent Incentives:** Pursuant to State density bonus law, if a developer allocates at least 20 percent of the units in a housing project to lower income households, 10 percent for very low income households, or at least 50 percent for "qualifying residents" (e.g. senior citizens), the City must either a) grant a density bonus of 25 percent, along with one additional regulatory concession to ensure that the housing development will be produced at a reduced cost, or b) provide other incentives of equivalent financial value based upon the land cost per dwelling unit. The developer shall agree to and the City shall ensure continued affordability of all lower income density bonus units for a minimum 30 year period.

Previous Accomplishments: The City's 1984 Housing Element established an action program to adopt a City ordinance to grant density bonuses for the provision of low income housing units. While the City has not adopted such an ordinance, density bonuses are still permitted pursuant to state law. According to City Planning Staff, Perris has not processed or received application for any density bonus projects since 1984.

While the lack of density bonus requests may be in large part related to the availability of vacant land at adequate densities in Perris, another factor may be inadequate program advertising.

Program Goals: In order to facilitate the use of density bonuses as a means of providing housing affordable to lower income households, the City will develop an informational brochure which explains the density bonus program. This brochure will be displayed at the public counter, and City staff shall review the program with residential development applicants. The City shall revise its Zoning Code to reflect

these density bonus provisions and develop the density bonus informational brochure by the end of 1991.

11. **Mortgage Revenue Bond Financing:** The County of Riverside has established two revenue bond housing programs to increase the supply of affordable housing in the County - the Multi-Family Revenue Bond Program and the Single Family Residential Mortgage Revenue Bond Program. Under these programs, tax-exempt bonds are issued to provide funds for construction and mortgage loans to encourage developers to provide both rental and for-sale housing which is affordable to lower income families and individuals.

The Multi-Family Revenue Bond Program is designed to make financing available to developers for the construction of multi-family residential rental units in the County. In order to receive financing through the bond program, developers must reserve for 10 years, 20 percent of the units for rental by families or individuals who earn 80 percent or less than the median family income in Riverside County. In addition, for recent projects, half of the lower income units must be reserved for occupancy on a priority basis for tenants who generally earn 50 percent or less of the median income. Projects financed after the passage of the 1986 Tax Reform Act must commit their 20 percent designated units for a period of 15 years.

The Single Family Residential Mortgage Revenue Bond Program is designed to provide mortgage loans to first-time homebuyers whose incomes do not exceed maximum Federal limits. Buyers must also intend to live in the homes as their principal residence. Mortgage loans offered under the bond program generally have lower interest rates than conventional loans. Loans are made available for attached and detached single family residences primarily in eligible developments at various locations throughout the County. A smaller portion of funds are available for existing or resale units Countywide.

Previous Accomplishments: The City's adopted Housing Element does not identify bond-financing as a target funding source for affordable housing. Nonetheless, the City has initiated three single-family bond issues in 1988 and 1989 for a total of \$39 million. Bond financing is available from the City for projects which do not exceed the maximum sales price established by the State. As yet, no multi-family

projects in Perris have been funded under the Riverside County Multi-Family Revenue Bond Financing Program. The City has not applied for funds from the County/State or provided outreach to encourage developers to utilize available multi-family bond financing.

Program Goals: Bonds provide a cost-effective mechanism the City can utilize to promote affordable ownership and rental opportunities. The City's five year goals for this program are: 1) enter into an agreement with Riverside County to make mortgage revenue bond financing available to developers of multi-family projects; 2) advertise the availability of bond financing to multi-family developers and first time homebuyers; 3) on an annual basis, assess the demand in the City for Mortgage Revenue Bond Financing and apply for allocations of funds through the County; and 4) achieve the development of one multi-family bond financed project.

12. **Low/Moderate Property Tax Rebate Program:** The City of Perris is presently contemplating establishing a property tax rebate program for low and moderate income first time homebuyers. The rebate would qualify additional first time homebuyers for mortgage financing, allowing them to enter the ownership market. The property tax rebate would be funded through the City's redevelopment set aside fund.

Previous Accomplishments: In 1988, the City of Perris provided a property tax rebate to the developer of the 201 unit Air Force Housing Project, in addition to contributing approximately \$45,000 to assist in project construction costs.

Program Goals: The City of Perris will work to establish a property tax rebate program by the end of 1991. The quantified objective of this program is to provide assistance to two housing projects within the five year time frame of the Housing Element.

13. **Mortgage Credit Certificate Program:** The County of Riverside has initiated a mortgage credit certificate program for first time homebuyers. Through the program, qualifying households receive a 20 percent credit on their annual home mortgage interest payments over the life of the mortgage.

Previous Accomplishments: Since adoption of the program by the County in 1987, 14 mortgage credit certificates have

been issued to first time homebuyers in Perris, with an interest subsidy totaling \$231,566 to date.

Program Goals: The City of Perris will maintain its cooperative agreement with the County for the mortgage credit certificate program, and will assist the County in advertising the program through distribution of program brochures to local realtors and residential sales offices.

14. **Home Sharing:** Many seniors who would prefer to live independently resort to institutionalized living arrangements because of security problems, loneliness, or an inability to live entirely independently. The shared housing program operated by the County assists low income individuals 18 years of age and older in locating roommates to share existing housing in the community; the majority of the program's applicants are senior citizens. Services offered include information and referral, outreach, client counseling, placement and follow-up. Monthly rental rates are generally between \$250 - \$275, providing an affordable housing alternative for many single-person households.

Previous Accomplishments: The Riverside County shared housing program is operated out of four offices located throughout the County. The closest office to Perris is located in the City of Riverside. This office averages 15-20 roommate matches per month, and indicates they receive numerous calls from Perris residents.

Program Goals: The City of Perris will assist the County in advertising the shared housing program through placement of program brochures in key locales throughout the community. The quantified objective of this program is to achieve 10 roommate matches on an annual basis in Perris.

15. **Non-Profit Construction:** A non-profit housing corporation (NPC) works to develop, conserve and promote affordable housing, either owner or renter-occupied. Particularly in relation to senior citizens housing (such as HUD Section 202 projects), the NPC is generally a local religious organization interested in developing affordable housing. The NPC is often involved with what is called "assisted housing," where some type of government assistance (such as Section 8) is provided to the individual household to keep rents afford-

able. Housing corporations can work with assisted housing in several ways.

- a. The non-profit may assemble a development package and sell it to a profit-motivated developer. The package usually consists of a site, project design, the necessary permits, and, in some cases, preliminary financing commitments. The advantage of this method is that the NPC can get low-and moderate-income housing built while ending its involvement early in the process and going on to other projects. The disadvantage is that the NPC may lose control over the development at the time of sale. However, the NPC could negotiate to retain some control over the project in the contractual agreement between it and the developer.
- b. The NPC may participate in a joint venture with a profit-motivated developer. Though it usually performs the same functions as in the first method, the non-profit can retain more control over the development and gain hands-on development experience while benefiting from the financial resources of the for-profit developer. In this option, however, the non-profit has a longer involvement and will have to negotiate the rights and responsibilities of the two partners.
- c. In the third approach, the NPC is the developer. Under this scenario, the group must employ staff with necessary expertise or rely heavily on consultants. In return, the group has total control over the development. This option requires more risk, money, time, effort, and capability on the part of the NPC.

Program Goals: A non-profit corporation can help meet the goals for additional housing by implementing or assisting with the implementation of programs described in this element. The City will actively support local non-profit groups to facilitate the development and improvement of both senior citizen and low cost housing in Perris.

16. **Reverse Mortgage Program:** The most substantial asset of most elderly homeowners is their home, which usually increases significantly in value with inflation. And while owning a home may provide a rich asset base, with the onslaught of retirement and a fixed income, many elderly homeowners quickly become income poor. Home mainte-

nance repairs multiply as the home ages, and the rising costs in home utilities, insurance, taxes, and maintenance often get deferred altogether, creating an unsafe and often depressing living environment for the senior.

An alternative option for elderly homeowners is to draw needed income from the accumulated equity in their homes through a reverse mortgage. A reverse mortgage is a deferred payment loan or a series of such loans for which a home is pledged as security. Qualification for the loan is based primarily on property value rather than on income, allowing the elderly homeowner on a fixed income to receive a loan for which he or she would not otherwise qualify. Most reverse mortgage programs permit homeowners to borrow up to 80 percent of the assessed value of their property, receive needed principal of up to 25 percent of the loan, and then receive monthly annuity payments for the life of the loan.

The City shall work with an existing social service group in establishing a reverse mortgage program for seniors. Rather than making the loans themselves, the City/social service group's role could be to facilitate the initiation of reverse mortgage loans through the following steps. First, the City/social service groups would need to provide educational and counseling services to seniors interested in pursuing a reverse mortgage. Second, the City/social service group would need to work with local lending institutions which currently provide these loans to gain a thorough understanding of the application process. The City/social service group could then work with the seniors to complete the loan applications and assist in providing any other necessary information to the bank. Based on available information, the following companies and lending institutions are known to offer reverse mortgage loans in the Southern California area:

1. Security Pacific National Bank, City of Downey
(213) 869-1056
2. Capital Holding
1-(800) 431-8100
3. Providential Home Income Plan
(714) 793-2309

4. American Homestead
1-(800) 233-4762

Remove Governmental Constraints

Under present law, the Perris Housing Program must include the following:

Address and, where appropriate and legally possible, remove governmental constraints to the maintenance, improvement, and development of housing.

17. Zoning Ordinance: The City of Perris has developed a comprehensive Zoning Ordinance to implement its General Plan. The following regulations have an effect on the conservation and development of affordable housing in Perris:

- Provisions for reduced lot sizes (5,500 square feet) under the R-2C zone
- Provisions for specific plans which provide for flexibility in density
- Provisions for manufactured housing in single family zones
- Provisions for second units on single-family lots
- Provisions for reduced parking requirements for senior citizen housing projects

Previous Accomplishments: Since adoption of the City's 1984 Housing Element, the City has modified their zoning ordinance to allow greater flexibility in the development of second units. These units are no longer age restricted to senior citizens, but may also be occupied by family members or handicapped individuals if a hardship exists. The unit square footage is permitted to be up to 75 percent of that of the primary residence, where they had previously been limited to a maximum of 450 square feet.

Program Goals: This Housing Element is part of an overall update to the City of Perris General Plan. Upon completion of the Plan update, the City will revise its Zoning Ordinance

as necessary to provide compliance with the General Plan. The following provisions related to housing will be among those added to the City's Zoning Code:

- State density bonus provisions for the development of lower income and senior citizen housing.
- Allowances for the development of transitional housing and emergency shelters in specified locations subject to a Conditional Use Permit.

The goal of this program is to revise the City's Zoning Ordinance by the end of 1991 to provide consistency with the updated General Plan, and to ensure City standards are not excessive and do not unnecessarily constrain affordable housing.

18. **Efficient Processing:** The evaluation and review process required by City procedures contributes to the cost of housing in that holding costs incurred by developers are ultimately reflected in the unit's selling price. In order to minimize project holding costs, jurisdictions should streamline their review procedures to the greatest extent possible and without compromising adequate review.

Program Accomplishments: The City's adopted Housing Element establishes a program action to review the City's development processing procedures and schedules in an effort to streamline the permit review and approval process. The City reviews their project review process on an on-going basis, and has maintained project review times comparable to other Riverside County cities.

Program Goals: In light of the magnitude of development applications received by the City, project review times can not realistically be further reduced. The City will continue to efficiently review and process housing projects.

19. **Development Fees:** Various fees and assessments are charged by the City to cover the costs of processing permits and providing services and facilities. While almost all these fees are assessed on a pro rata share system, they often contribute to the cost of housing and constrain the development of lower priced units. Certain fees could be waived or subsidized by the City for the provision of lower income and senior citizen housing.

Previous Accomplishments: The City of Perris' residential fee schedule is comparable to similar jurisdictions, and can not be considered excessive. The City has recently reduced its fees for the required Conditional Use Permit for second units thus reducing this constraint to second unit housing.

Program Goals: The goal of this program is to review City fees to ascertain if waiver or subsidy by the City may be beneficial for the provision of affordable and senior citizen housing. Based on the outcome of this review, the City may adopt an ordinance establishing a modified fee schedule for affordable and senior citizen projects by the end of 1991.

Equal Housing Opportunity

In order to make adequate provision for the housing needs of all economic segments of the community, the housing program must include actions that accomplish the following:

Promote housing opportunities for all persons regardless of race, religion, sex, family size, marital status, ancestry, national origin, color, age or physical disability.

More generally, this program component entails ways and means to promote equal housing opportunity.

20. **Equal Housing Opportunity Services:** The County of Riverside established the New Horizons' Fair Housing Program which provides a broad range of services such as: education on fair housing laws, referrals to public agencies on discrimination matters, coordination of training workshops, and publishing a newsletter on fair housing activities. The activities also include news releases to the media, and distribution of information to the housing industry, apartment managers, and rental agencies. The Fair Housing Division provides assistance to the housing industry in voluntary affirmative marketing programs, shows, and conventions. The establishment of a Fair Housing Program with goals, and objectives and the participation of other responsible agencies of the County, attains implementation of various strategies, to increase availability of housing to low and moderate income families and individuals through advocacy and non-discriminatory policies.

Previous Accomplishments: The County of Riverside allocates funds on behalf of nonentitlement cities, including Perris, in support of the Horizon's Fair Housing Program.

Program Goals: The County's Fair Housing Program will expand its present structure to incorporate the Community Housing Resource Board (CHRB) program component. The CHRB is designed to work with the real estate and building industry to implement and monitor the activities of the National Voluntary Affirmative Marketing Agreement (VAMA), in the areas of rental, sales, advertising, training and recruitment. The quantification of program achievement can only be measured through the settlement of disputes and the prevention of resident dislocation, loss of occupied units, and stabilized vacancy factors as a result of the efforts of the Fair Housing Program.

IMPLEMENTATION PROGRAM

The Housing Element Implementation Program identifies the five-year schedule of actions the City of Perris intends to undertake to implement the goals and policies set forth in the Element. The previous chapter outlines a comprehensive program strategy for Perris to address issues of housing conservation and rehabilitation, provision of adequate sites for housing, affordable housing development, removal of governmental constraints, and equal housing opportunities. The matrix on the following pages (Table H-5) summarizes the future five year goals of each housing program, along with identifying the program funding source, responsible agency, and time frame for implementation, and constitutes the implementation program for the Housing Element.

**TABLE H-5
HOUSING PROGRAM SUMMARY**

| Housing Program | Program Objective | 5-Year Goal (# Units) to be Assisted | Funding Source | Responsible Agency | Time Frame |
|---|---|--|---|------------------------------------|--|
| CONSERVING & IMPROVING EXISTING AFFORDABLE HOUSING | | | | | |
| 1. Home Improvement Program (HIP) | Provide rehabilitation assistance to qualifying owner and renter households. | Participate with County in HIP, with a five year assistance goal of 100 units. | CDBG | Planning and Community Development | End of 1991 |
| 2. Senior Home Repair Program | Provide grant monies to senior and disabled households for needed housing maintenance and modifications, e.g. wheelchair access, and repairs. | Cooperate with County to provide assistance to 150 households. | CDBG | Planning and Community Development | August 1990 |
| 3. Rental Rehabilitation Program | Provide rehabilitation assistance to substandard rental properties. | Provide additional funding to owners with a five year assistance goal of 40 units. | HUD; CDBG and Redevelopment Set Aside as necessary. | Planning and Community Development | End of 1991 |
| 4. Code Enforcement | Enforce City codes pertaining to property maintenance, building and zoning. | Augment to provide information regarding available rehabilitation assistance. | Department Budget | Planning and Community Development | Offer rehabilitation assistance by end of 1991 |
| PROVISION OF ADEQUATE HOUSING SITES | | | | | |
| 5. Land Use Element/ Zoning Ordinance | Provide a range of residential development opportunities through appropriate land use and zoning designations. | Accommodate City's share of regional housing needs, identified as 7,509 d.u.s. | None necessary | Planning and Community Development | July 1994 |
| 6. Site Suitability Criteria | Establish specific criteria to evaluate potential project sites for affordable housing. | Incorporation of criteria into Zoning Ordinance. | Department Budget | Planning and Community Development | 1992 |

**TABLE H-5
HOUSING PROGRAM SUMMARY
(continued)**

| Housing Program | Program Objective | 5-Year Goal (# Units) to be Assisted | Funding Source | Responsible Agency | Time Frame |
|--|--|---|--|---|--|
| 7. Sites for Transitional Housing/Shelters | Facilitate the development of transitional and emergency housing for the homeless through revisions to the Zoning Ordinance. | Work towards development of a transitional housing facility/emergency shelter in Perris. | Department budget as necessary | Planning and Community Development | Amend Zone Code by end of 1991. |
| ASSIST IN DEVELOPMENT OF AFFORDABLE HOUSING | | | | | |
| 8. Affordable Housing Development in Downtown Perris | Facilitate the development of housing affordable to lower income residents through provision of redevelopment incentives. | Provide for the development of a minimum of 200 units of very low income housing, with first priority targeted towards senior housing facility. | Redevelopment Set Aside Funds | Planning and Community Development; Redevelopment | Specific Plan adopted by end of 1991, units on-line by mid-1994. |
| 9. Section 8 Assistance Payment/Housing Vouchers | Extend rental subsidies to lower income families and elderly. Encourage listing of rental units with County Housing Authority. | Continued subsidy of 245 households, with subsidy to an additional 25 households over the 5-year period. | HUD-Section 8 Cert. and Housing Vouchers | County Housing Authority; Perris Planning and Community Development | Ongoing |
| 10. Density Bonus Program/Equivalent Incentives | Encourage development of housing for seniors and low income households through provision of density bonus/other equivalent incentives. | Incorporate density bonus program into City's Zoning Ordinance. | Department budget as necessary | Planning and Community Development | Revise Zone Code by end of 1991 |

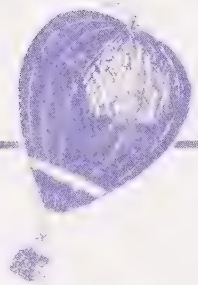
**TABLE H-5
HOUSING PROGRAM SUMMARY
(continued)**

| Housing Program | Program Objective | 5-Year Goal (# Units) to be Assisted | Funding Source | Responsible Agency | Time Frame |
|---|---|--|-------------------------|---|---|
| 11. Mortgage Revenue Bond Financing | Increase supply of rental and ownership units affordable to low and moderate income households. | Enter into an agreement with Riverside County for multi-family mortgage revenue bonds. Advertise availability of bonds, and achieve the development of one multi-family bond financed project. | Revenue Bonds | Riverside County; Perris Planning and Community Development | Enter into agreement by end of 1991. Achieve one multi-family bond project by 1994. |
| 12. Low/Moderate Property Tax Rebate | Assist low and moderate income households to qualify for home purchase. | Establish property tax rebate program and provide assistance to two housing projects (30 units) | Redevelopment Set-aside | City Manager's Office, Planning and Community Development | By end of 1991 |
| 13. Mortgage Credit Certificate Program | Assist first-time homebuyers to qualify for home mortgages. | Assist County in advertising program. | CDBG | Planning and Community Development | Ongoing |
| 14. Home Sharing | Assist seniors in locating roommates to share existing housing. | Assist in program advertising to achieve 10 roommate matches per year. | State HCD | Riverside County; Perris Planning and Community Development | Ongoing |
| 15. Non-Profit Construction | Provide expanded affordable housing opportunities in Perris. | Coordinate with local non-profit groups to increase supply of affordable housing. | None necessary | Planning and Community Development | Ongoing |
| 16. Reverse Mortgage Program | Allow Seniors to remain in their homes by borrowing against accumulated home equity. | Coordinate with social service groups and lending institutions to facilitate initiation of a reverse mortgage program and provide educational outreach to seniors. | None necessary | Planning and Community Development | Three years |

**TABLE H-5
HOUSING PROGRAM SUMMARY
(continued)**

| Housing Program | Program Objective | 5-Year Goal (# Units) to be Assisted | Funding Source | Responsible Agency | Time Frame |
|---|---|--|-------------------|---|----------------|
| REMOVE GOVERNMENTAL CONSTRAINTS | | | | | |
| 17. Zoning Ordinance | Ensure City standards are not excessive and do not unnecessarily constrain affordable housing. | Revise Zoning Ordinance to comply with General Plan. | Department budget | Planning and Community Development | By end of 1991 |
| 18. Efficient Processing | Provide concurrent processing for residential projects to shorten review time and minimize related holding costs. | Continue to provide concurrent processing for residential projects. | None necessary | Planning and Community Development | Ongoing |
| 19. Development Fees | Provide reduced development fees for affordable and senior citizen housing. | Review City fees and provide reduced development fees for affordable housing as appropriate. | General Fund | Planning and Community Development | End of 1991 |
| EQUAL HOUSING OPPORTUNITY SERVICES | | | | | |
| 20. Equal Housing Opportunity Services | Affirm a positive action posture which will assure unrestricted access to housing. | Provide tenant/landlord counseling, housing discrimination response, and related housing services. | HUD-CDBG | County of Riverside Fair Housing Division | Ongoing |
| TOTAL UNITS TO BE CONSTRUCTED: 7,509 (regional housing need) TOTAL UNITS TO BE REHABILITATED: 290 (CDBG, HUD) TOTAL UNITS TO BE CONSERVED: 320 (rent subsidies, home sharing) | | | | | |

PERRIS



GENERAL PLAN

CITY OF PERRIS

CIRCULATION ELEMENT

OCTOBER 14, 1991

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INTRODUCTION TO THE CIRCULATION ELEMENT

Reliance on the private automobile, not only for commuting to work but for shopping, educational and social activities, is a necessity for a vast majority of Southern California residents. The unmatched freedom provided by the automobile and its associated system of freeways and arterial streets provides the expectation that timely and convenient access can be made of the far ranging assets of Southern California ranging from skiing in the mountains and then, on the same day, surfing in the ocean.

The analyses conducted as part of the City of Perris General Plan Update Study, together with regional studies being made within the Western Riverside County Area, clearly show that maintaining this high level of service on the transportation system is under extreme pressure and, therefore, the challenge of maintaining these expectations is very formidable. The fact that the population within the City of Perris General Plan Study Area is expected to grow from approximately 18,000 in 1987 to more than 90,000 by the year 2010 clearly illustrates the transportation challenge to the City recognizing that only a small portion of the circulation system has been constructed.

PURPOSE OF ELEMENT

The purpose of the Circulation Plan is to provide for a safe, convenient and efficient circulation system for the City. In order to meet this objective, the Circulation Element has been designed to accommodate the anticipated transportation needs based on the estimated intensities of various land uses within the region. This element describes the extent of physical improvements needed to accommodate anticipated population growth and also introduces other techniques (e.g., restricted street parking, transportation systems management plans and congestion management plans) which can be used to improve and maintain an acceptable level of service for the City's circulation system.

The element is also intended to serve as a basic plan for other infrastructure systems such as sewer lines. As the State's General Plan Guidelines indicate, the Circulation Element is actually an infrastructure plan which "concerns itself with the

circulation of people, goods, energy, water, sewage, storm drainage and communications."

RELATED PLANS AND PROGRAMS

The City of Perris is directly impacted by urban development and growth in the area surrounding the City. The City of Moreno Valley, which adjoins the northerly boundary of Perris east of State Route 215, is a rapidly growing industrial and residential development area. Significant traffic volumes from this area outside the City will utilize the north-south arterials and the Ramona/Cajalco corridor as well as State Route 215 which will be converted to interstate freeway standards with construction beginning in 1991.

Future development within the county area on the west side of Perris is also expected to have a significant impact on traffic volumes on the City's arterial system as well as I-215 and the Ramona/Cajalco corridor.

In addition to these rapidly growing urban areas immediately adjacent to the City of Perris, the City's backbone transportation component - the I-215 corridor - is heavily impacted by traffic originating outside the Perris area and driving through the area.

State Programs

The California Department of Transportation (Caltrans) is currently planning for the conversion of State Route 215 to interstate standards with construction beginning in 1991. This construction will include a new diamond interchange at Ethanac Road in the southerly portion of the City, together with the widening of the existing four lane expressway from the existing "D" Street interchange ramps northerly. The widening will be to six lanes and will include a new interchange at Nuevo Road and an overcrossing at Placentia Avenue. In accordance with the adopted Freeway Agreement between the City and Caltrans, the intent is to convert the overcrossing at Placentia Avenue to a full interchange in the future. A new interchange will also be constructed at Oleander Avenue in the northern portion of the City. After completion of the Interstate conversion project, the portion of I-215 within the Perris General Plan Study Area will have six freeway lanes from the "D" Street interchange ramps

northerly and four lanes from the "D" Street interchange southerly. Access to the freeway will be at interchange locations only. These locations will be as follows:

- Ethanac Road
- Case Road
- 4th Street/Redlands Avenue
- "D" Street
- Nuevo Road
- Ramona/Cajalco
- Oleander Avenue

Caltrans presently has no specific plans for widening I-215 from the "D" Street interchange southerly.

County Programs

At the present time the County's Measure "A" Program, which is administered by the Riverside County Transportation Commission, is having a direct positive impact on the City circulation system by funding (on an equal basis with the City's redevelopment Agency funds), the widening of 4th Street from "G" Street to the westerly city limits. Under this project, Fourth Street will be widened to a 64-foot curb-to-curb width. Measure A Funds are also available to assist the City in modernizing the existing interchange at 4th Street/Redlands Avenue.

Although 4th Street is designated as State Route 74, no State funds will be involved in the widening or interchange improvement projects mentioned above.

Other Measure "A" Funds are anticipated to be available to assist the City in developing other arterial improvement programs.

Bus Service

The Riverside Transit District (RTD) provides bus service within Perris and other portions of western Riverside County. Although bus route and transit stop planning generally responds to identified transit needs, the City can work with RTD to include public transportation consideration in land use planning decisions.

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD), the agency responsible for monitoring air quality in the south coast region, has adopted Regulation XV as part of its "Rules and Regulations." Intended to reduce pollutant emissions from vehicles commuting between home and the workplace, Regulation XV also serves to reduce vehicle trips and thereby may be considered a circulation program.

Regulation XV requires employers of 100 or more persons to prepare and implement trip reduction plans. Fines for non-compliance may be levied against employers.

Proposition 111

Approval of Proposition 111 by California voters in June 1990 made effective Assembly Bill No. 1791. This law will have a direct impact on the City of Perris in several ways which are enumerated within the bill. In general, the bill requires that in cooperation with the regional transportation agency, which in this case would be the Riverside County Transportation Commission (RCTC), a traffic congestion management program be developed, adopted and annually updated in order to ensure that the City of Perris does not lose its pro rata share of increased funding resulting from the gas tax increase of Proposition 111. At the time of this draft the specific guidelines for compliance with AB 1791 were not available from RCTC. However, this law may have significant impact on all urbanized areas of the State.

City Programs

At the present time the City of Perris has an ordinance which requires payment into a fund for traffic signal construction for new dwelling units and other types of construction.

In the future the City may have a role in the establishment of a regional-wide developer fee for street improvements. Approval of past specific plans in the City has included a requirement that the developer of these specific plans to participate in an area-wide program of developer fees for arterial street improvements.

The relationship of the Circulation Element to other elements of the General Plan is described in the Introduction to the Plan.

SCOPE AND FORMAT OF ELEMENTS

This element is composed of four sections. The first section, the Introduction, includes a description of the Element's purpose and related plans and programs. The second section which follows contains the City's goals and policy statements for improving circulation in and around Perris. The third section is the Circulation Plan, which identifies standards for existing and future intersections and roadways, indicates where road and intersection upgrades are necessary, and defines the City's service level objectives to be achieved by the circulation system. Also included in the Circulation Plan is a discussion of alternate modes of transportation, and other infrastructure needs. The fourth section of the Circulation Element contains the implementation program which contains specific implementing measures to realize the Element's goals and policies.

CIRCULATION ELEMENT GOALS AND POLICIES

The City's primary circulation goal is to provide a circulation system that has adequate capacity to meet the demands of future development. Future development is defined to be that development occurring consistent with adopted land use policy.

Table LU-3 in the Land Use Element outlines the total development anticipated to exist within the planning area at build-out. As described in the Land Use Element, "build-out" assumes that not all properties will be developed to their maximum potential, but that an average density or intensity of development will occur City-wide. For purposes of estimating traffic volumes for the year 2010, it has been assumed that all residential land uses will be at 70 percent of build-out except for the Residential 22 category, which was assumed to be at 100 percent of build-out by the year 2010. For the non-residential land uses, it has been assumed that the neighborhood commercial, general commercial, and professional office categories will be at 100 percent of build-out by the year 2010 while the business park, light industrial and general industrial land uses were assumed to be at 50 percent of build-out by the year 2010.

Circulation System Deficiencies

Under current traffic and roadway development conditions, the greatest system deficiencies occur as follows:

- Route 215 at signalized Nuevo Road intersection
- 4th Street at the four-way stops at Perris Boulevard, "D" Street and "A" Street intersections
- Perris Boulevard at the Ramona Expressway intersection

The signalized intersection on Route 215 at Nuevo Road will be converted to a full diamond interchange as part of the interstate conversion project which will be conducted by Caltrans. The extreme congestion that exists during peak periods at this

signalized intersection will be eliminated in the near term with the construction of the interchange.

Redlands Boulevard does not extend northerly of Nuevo Road, thereby requiring Wilson Avenue, a local residential street, to carry increasingly higher arterial type traffic volumes.

The 4th Street widening project, also previously discussed, will greatly reduce the congestion conditions on 4th Street. This project will include the construction of traffic signals at Perris Boulevard, "D" Street and "A" Street. This signal construction, together with the street widening, will greatly increase the capacity along this route.

As of June 1990, plans are being prepared for the widening of Perris Boulevard to provide four moving lanes plus a one-way left turn lane as well as improvements to the signal system at Ramona Expressway and the installation of a new traffic control system at Rider Street. The construction on the Perris Boulevard project, which will extend from northerly of Nuevo Road to Ramona Expressway, is currently in progress.

Other system deficiencies are concerned with the routing of through traffic on local streets such as Wilson Avenue northerly of Nuevo Road. Development of the arterial street pattern will rectify this type of system deficiency by removing arterial traffic to a system of roadways intended as its primary function to serve longer trip lengths and thereby enable local streets such as Wilson Avenue to be converted to their intended function which is to serve land use access only.

The goals and policies presented below emphasize the importance of establishing a circulation system which can support existing and future development throughout all areas of the General Plan Study Area. The implementation measures identify specific programs and infrastructure improvements designed to achieve service level objectives.

SAFE CONVENIENT AND EFFICIENT TRANSPORTATION SYSTEM

The City desires the development of a freeway and arterial system intended to provide for transportation needs generated by future development within the study area, and also to

accommodate anticipated growth in the areas to the north and east adjoining the Perris study area.

GOAL 1: Develop a transportation system that is safe, convenient, efficient and provides adequate capacity to meet local and regional demands.

Policy 1.1: Develop a circulation system of City streets, excluding freeway, that is capable of serving existing traffic and expected future increases in traffic.

Policy 1.2: Follow standards for circulation element roadways in designing and constructing future street improvements.

Policy 1.3: Include transportation system management techniques, such as park-and-ride lots, traffic signal synchronization, carpool/vanpool programs, flexible work hours and the creation of Transportation Management Associations as requirements of development by major employers.

Policy 1.4: Take a leadership role in the preparation of a regional traffic mitigation program designed to resolve regional traffic issues.

Policy 1.5: Logically relate local street patterns to the overall network of arterial and collector streets as provided for in the Circulation Network. Driveway entrances onto surrounding arterial, secondary and major streets should be restricted when practical, and through traffic on interior residential streets should be minimized.

Policy 1.6: Establish a signaled arterial street system that will provide an acceptable level of service during peak hours under build-out conditions.

Policy 1.7: Develop a program for general mitigation fees for roads and traffic signals.

Policy 1.8: Require major employers to prepare Transportation Management Plans with provisions for carpooling and vanpooling, flexible work hours or other techniques.

ALTERNATE TRANSPORTATION MODES

Alternate modes of transportation, such as public transportation and bicycles are used by those who do not have access to automobiles and by those who choose to leave their cars at home. The Riverside Transit District (RTD) provides bus service within Perris and other portions of western Riverside County. Rail transportation may also provide an alternate means of travel in the future. Bicycle facilities will be installed in conjunction with circulation system improvements and trails for pedestrians, cyclists and equestrians can reduce dependency on private automobiles.

GOAL 2: Encourage the use of alternate transportation modes.

Policy 2.1: Continue to cooperate with the Riverside Transit Agency for the provision of public bus service in the planning area.

Policy 2.2: Establish bus shelters at RTA stops to increase public recognition and use of the local and regional transit system.

Policy 2.3: Cooperate with Caltrans and the County of Riverside in providing sites and improvements for park-and-ride facilities.

Policy 2.4: Take a leadership role in regional planning efforts to provide community rail service throughout the planning area, while protecting railroad right of way.

Policy 2.5: Provide a system of bicycle facilities (paths, lanes and routes) in conjunction with circulation system roadway improvements.

Policy 2.6 Develop a system of pedestrian/equestrian/bicycle trails within the planning area, to meet the community needs.

SEPARATION OF TRAFFIC

Separating heavier non-residential traffic, particularly truck traffic, from residential areas preserves neighborhood character and safety. Higher capacity roadways are intended to accommo-

date this heavier traffic to reduce or avoid impacts on residential areas.

GOAL 3: Separate vehicular traffic associated with commercial, manufacturing and agricultural uses from residential neighborhoods.

Policy 3.1: Provide a circulation system which includes higher capacity roadways for commercial and manufacturing areas to avoid traffic overflow into adjacent residential areas.

Policy 3.2: Provide safe and convenient pedestrian access between residential neighborhoods and the parks and open space and schools which service those neighborhoods.

Policy 3.3: Establish a system of truck routes which reduces truck traffic on residential streets.

Policy 3.4: Design residential street systems to reduce through traffic.

Policy 3.5: Design local streets so as not to create "short-cuts" by linking arterial roads.

PARKING

Adequate and convenient parking is an essential part of an effective circulation system. The provision of suitable off-street parking can increase the overall efficiency of the circulation system by promoting freer and safer movement of traffic along roadways.

GOAL 4: Ensure the provision of adequate off-street parking for all land uses.

Policy 4.1: Require all new development to provide adequate off-street parking based on expected parking needs.

Policy 4.2: Provide adequate loading areas within off-street parking areas for all commercial and manufacturing land uses.

THE CIRCULATION PLAN

The implementation of General Plan land use policy will result in a six-fold increase of the current population and a proportionate increase in traffic volumes. A traffic model has been developed that is used by the City to determine what improvements to the circulation system are needed to achieve the service level objectives anticipated below.

The traffic model enables land use and circulation alternatives to be examined in conjunction with one another to determine where future system deficiencies will occur. To develop a circulation plan that will accommodate future growth consistent with land use policy and will preserve service level objectives, many system components such as road widenings and extensions were tested. The analysis resulted in the development of the Circulation Plan.

The Circulation Plan consists of three main components: the Roadway Component, the Public Transportation Component and the Infrastructure Component. Each component consists of the following sections:

Roadway Component

- Freeways and Expressways
- Primary Arterials
- Secondary Arterials
- Collector Streets
- Local Streets
- Freeway Interchanges
- Freeway Overcrossings
- Service Levels
- Special Intersection Geometrics
- Truck Routes
- Bicycle Transportation

Public Transportation Component

- Rail Line/Stations
- Bus Service

Infrastructure Component

- Water System
- Sewage system
- Storm Drain

ROADWAY COMPONENT

Functional Roadway Classification System

Streets and highways shown on the Circulation Roadway Plan are described and classified according to their primary function. This hierarchical system of roadways consists of five basic classifications as follows:

- Freeways and Expressways
- Primary arterials
- Secondary arterials
- Collector streets
- Local streets

Figure C-1 titled "Functional Roadway Classifications and General Planning Guidelines" provides considerable detail concerning the functions for each of these street systems together with an overview of general planning criteria for each of the street categories.

Roadway Standards

Freeways and Expressways: One freeway is shown on the Circulation Plan - I-215, a north-south, four-lane route. Caltrans has designated I-215 as an ultimate 10 lane facility. Upon completion of the conversion of Route 215 to interstate standards this freeway will have six lanes from the "D" Street interchange northerly and four lanes southerly from this interchange. Widening the four lane section to at least six lanes is considered a high priority to serve local and regional growth.

FIGURE C-1

FUNCTIONAL ROADWAY CLASSIFICATIONS AND GENERAL PLANNING GUIDELINES

| | Freeway and Expressway | Primary Arterial | Secondary Arterial | Collector | Local |
|--|---|---|--|---|---------------------------------------|
| Function | Traffic movement | Primary—longer-distance intercommunity and intra-metro area high-capacity traffic movement Secondary—land access | Primary—moderate distance intercommunity, intra-metro area traffic movement Secondary—land access | Primary—collect/distribute traffic between local streets and arterial system Secondary—land access Tertiary—inter-neighborhood traffic movement | Land access |
| Typical percent of surface street system mileage | NA | 5 to 10% | 10 to 20% | 5 to 10% | 60 to 80% |
| Continuity | Continuous | Continuous | Continuous | Not necessarily continuous; should not extend across arterials | None |
| Approximate spacing (miles) ^{1, 2} | 4 | 1 to 2 | ½ to 1 | ½ or less | As needed |
| Typical portion of surface street system vehicle-miles carried | NA | 40 to 65% | 25 to 40% | 5 to 10% | 10 to 30% |
| Direct land access | None | Limited—major generators only | Restricted—some movements may be prohibited; number and spacing of driveways controlled | Safety controls; limited regulation | Safety controls only |
| Minimum roadway intersection spacing | 1 mile | ¼ mile | ¼ mile | 300 feet | 300 feet |
| Speed limit (mph) | 45 to 55 | 35 to 45 in fully developed areas | 30 to 35 | 25 to 35 | 20 to 30 |
| Parking | Prohibited | Prohibited | Generally prohibited | Limited | Permitted |
| Comments | Supplements capacity of arterial street system and provides high-speed mobility | Backbone of street system | | Through traffic should be discouraged | Through traffic should be discouraged |

¹ Spacing determination should also include consideration of travel projections in the area or corridor based on ultimate anticipated development.

² Spacing will likely be greater in dense activity centers such as downtowns. Transit availability may also influence facility density and capacity by facility.

NA = Not applicable.

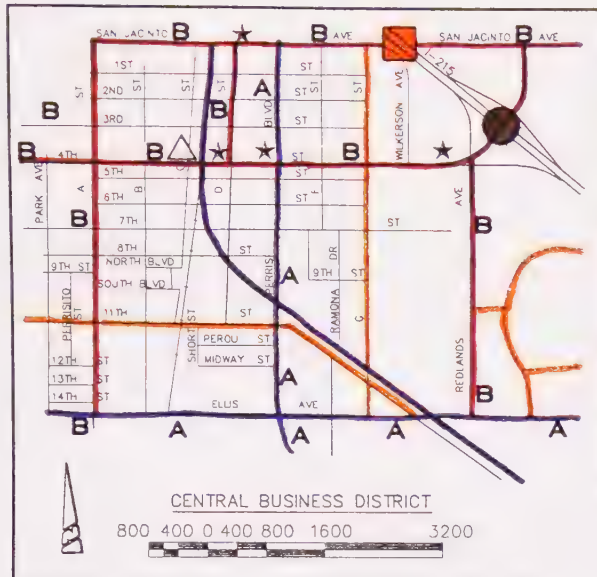
The Ramona/Cajalco Expressway is anticipated to be at least a six lane facility. The Ramona/Cajalco Expressway is currently a two to four lane facility. It is recommended that access to this facility be limited to arterials intersecting with the facility only. In other words, drive approaches should not be constructed along Ramona/Cajalco Expressway for access purposes in order to avoid safety hazards.

Interchanges: The Circulation Plan shows the locations of existing and proposed interchanges on the I-215 Freeway. The Circulation Plan shows that new interchanges on I-215 are planned for Placentia Avenue and the Ellis/Evans Avenue location. The other interchange locations shown on the Plan are either existing or to be constructed as part of the interstate conversion project. Each interchange will be designed and/or reconstructed to meet the specific demands of the anticipated traffic volumes at the particular location.

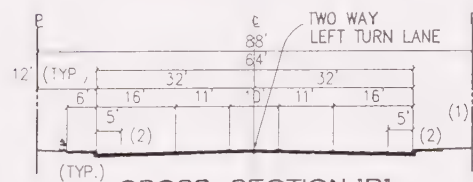
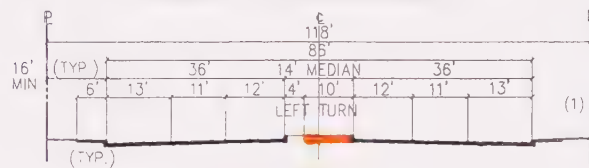
Overcrossings: The Circulation Plan shows the locations of proposed overcrossings for the I-215 Freeway. These overcrossings would have the same number of through lanes as the adjoining arterial street as shown on the plan. The overcrossings will reduce traffic volumes on the arterials that have interchanges and will be key elements in providing continuity of circulation from one side of the I-215 freeway to the other.

Secondary and Primary Arterial Streets: The cross sections for arterial streets in general vary from a curb-to-curb width of 64 feet to 86 feet in accordance with the cross sections shown on the Circulation Plan (Figure C-2).

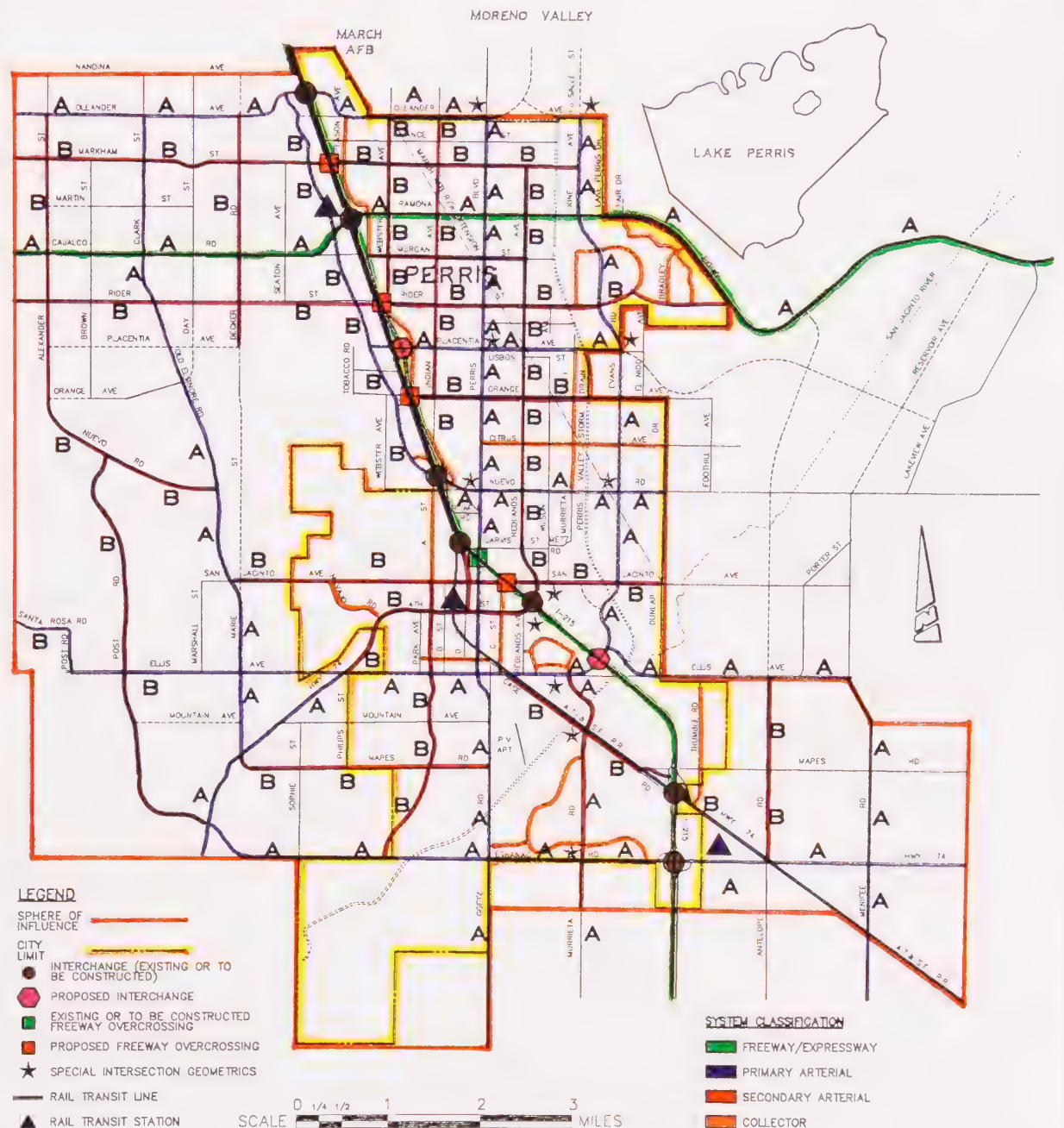
Collector Streets: The width of collector streets can range from 40 feet to 64 feet curb-to-curb with six feet of sidewalk on both sides depending on the particular design and traffic volumes to be served. Collector streets should have adequate capacity at their intersections with arterial streets in order to provide adequate number of traffic lanes to serve anticipated volumes within the prescribed level of service standard. This may mean that the curb-to-curb width may be wider for portions of the collector street at the approach to a particular intersection depending on the requirements based on a traffic study.



STREET CROSS SECTIONS



NOTE: STREET WIDTHS WITHIN SPECIFIC PLAN AREAS SHALL BE DETERMINED BY THE PARTICULAR SPECIFIC PLAN.



Local Streets: As general policy, local streets will have a 60 feet right of way and a curb-to-curb width ranging between 36 and 40 feet. Six foot wide sidewalks are to be included in general on both sides of local streets. In industrial areas, the curb-to-curb width may be widened from 44 feet to 56 feet.

Service Levels

The Circulation Plan has been developed in the recognition of the need to relieve existing congestion and to provide a circulation system that can accommodate future anticipated growth. The plan also takes into account the fact that growth anticipated to occur northerly and east of the planning area will use the street system in Perris. The goal of the system is to ensure that all signalized intersections operate at an acceptable level of service. The proposed definition of "accepted level of service" in traffic engineering terms is Level of Service "E" or better.

The circulation system of the City of Perris will be composed primarily of a system of signalized arterials, and it is important to recognize that the signalized intersections are the locations within the system where the level of service must be satisfied. The vast majority of system vehicle delay occurs at the signalized intersections because vehicles are required to stop on one arterial to provide time to service the vehicles on the crossing arterial.

The signalized level of service standards are in accordance with the current edition of the Highway Capacity Manual, as developed by the National Research Council of the National Academy of Sciences. The stop time delay methodology for signalized intersections as documented in the Highway Capacity Manual is the same methodology being recommended for adoption by Riverside County and its political subdivisions in accordance with the Special Committee Report published by the Riverside/San Bernardino Section of the Institute of Transportation Engineers.

Table C-1 titled "Levels of Service for Signalized Intersections" indicates the ranges in the amounts of average stop time delay for a vehicle for the various levels of service ranging from "A" through "F."

**TABLE C-1
LEVELS OF SERVICE FOR
SIGNALIZED INTERSECTIONS**

| LEVEL OF SERVICE | STOPPED DELAY PER VEHICLE (SECONDS) |
|------------------|-------------------------------------|
| A | 5.0 |
| B | 5.1 to 15.0 |
| C | 15.1 to 25.0 |
| D | 25.1 to 40.0 |
| E | 40.1 to 60.0 |
| F | 60.0 |

Level-of-service A describes operations with very low delay, i.e., less than 5.0 seconds per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

Level-of-service B describes operations with delay in the range of 5.1 to 15.0 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.

Level-of-service C describes operations with delay in the range of 15.1 to 25.0 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.

Level-of-service D describes operations with delay in the range of 25.1 to 40.0 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

Level-of-service E describes operations with delay in the range of 40.1 to 60.0 seconds per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

Level-of-service F describes operations with delay in excess of 60.0 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

For specific intersection evaluation, the delay figure used will be the weighted average of vehicular stop time delay for all movements of traffic entering the intersection during the p.m. peak hour.

The degree to which a signalized intersection approaches capacity is also important. An ICU or "X" value of 0.92 or less represents the City's general policy guideline.

Special Intersection Geometrics

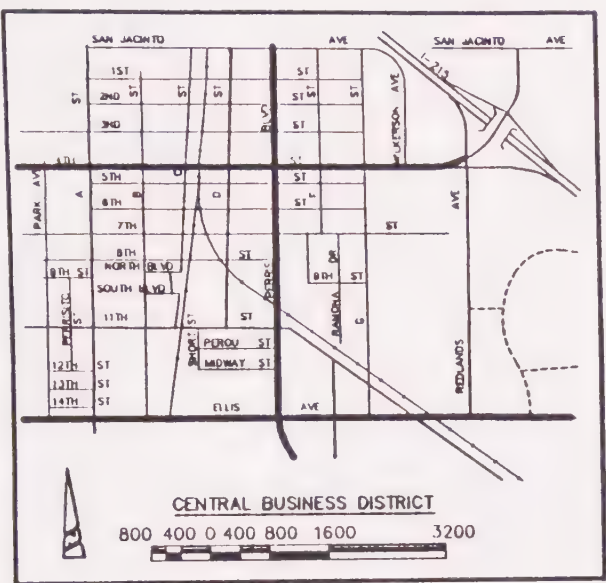
At the intersections of arterial streets shown on the Circulation Plan with a star symbol, special geometrics are needed to handle anticipated traffic volumes during the peak period within the prescribed level of service. The geometrics at these special intersections may involve double and single instead of single left turn lanes only and special exclusive right turn lanes for one or more of the roadway approaches. The determination of the specific geometrics depends on the specifics on the traffic volumes anticipated for the particular intersection.

Provision of special geometrics at these highly used intersections are needed to keep average stop time vehicle delay within the limits adopted as a policy issue in the General Plan.

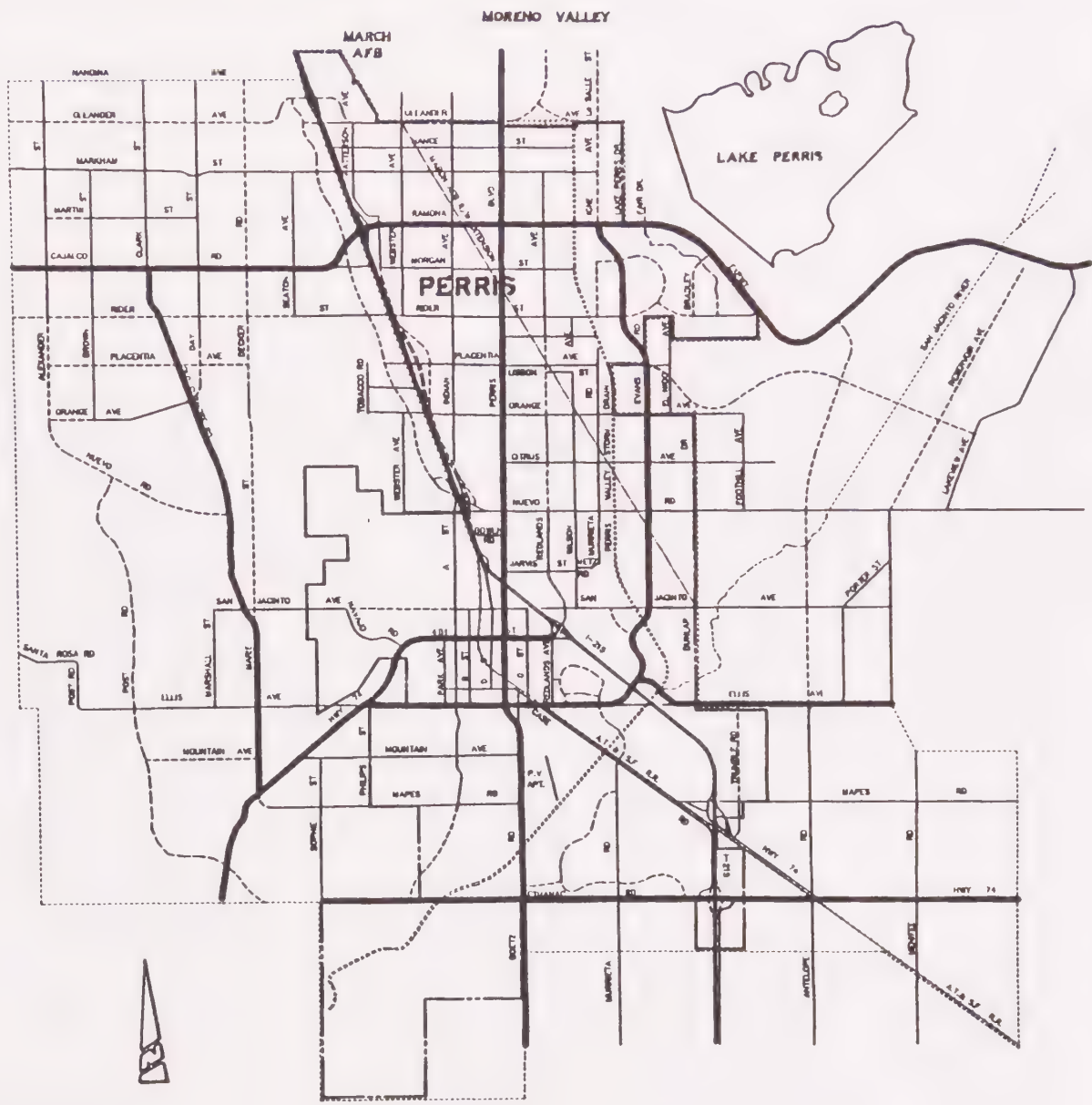
The segments of arterial streets between signalized intersections can function with a narrower curb-to-curb width than at these critical intersection locations because the traffic flow is not interrupted within the midblock sections. Precise standards are not defined because the types of improvements needed must be determined on an individual intersection basis.

Truck Routes

Figure C-3 titled "Truck Route Master Plan" shows the designated truck routes within the study area. The designated truck routes are intended to indicate arterial streets which may be used for truck movement in excess of the weight designated in the City Ordinance for movement through the City. In accordance with both local and State law, truck movements for the purpose of making deliveries within a city can use the most direct route to the particular delivery location.



LEGEND
 SPHERE OF INFLUENCE
 CITY LIMIT -----
 DESIGNATED TRUCK ROUTE ———



TRUCK ROUTE MASTER PLAN

FIGURE C-3

The City's Truck Route Enabling Ordinance is the specific legal vehicle by which truck routes which are shown in the General Plan as a policy issue are translated into specific legal routes when adopted by the City Council and the routes have been posted.

Bicycle Transportation

In accordance with the provisions of the California Vehicle Code, except for freeways, bicycles are afforded the same privileges and are required to adhere to the same regulations as motor vehicles on public streets. Because of the vast difference in protection while using the street, it is preferable for bicycles to be separated from vehicular traffic flow.

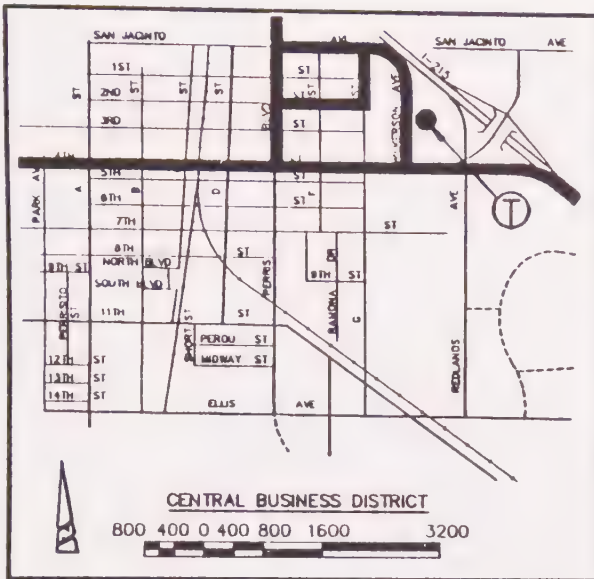
The development of separate pathways for bicycles within specific plan areas as well as along future development of the Perris Valley Storm Drain and San Jacinto River is encouraged. For safety reasons designation of marked bike lanes on arterial streets should be initiated only after a special study has been conducted.

PUBLIC TRANSPORTATION COMPONENT

The Circulation Plan (Figure C-2) shows the proposed location of a rail line along the route of the existing AT&SF Railway line. The purple triangles indicate the general location of stations along this railway routing. Leadership for the construction of a passenger service along this rail routing will come from an agency such as the Riverside County Transportation Commission, and sometime in the future this line will tie into a larger system serving commuters from Riverside County to Los Angeles and Orange Counties.

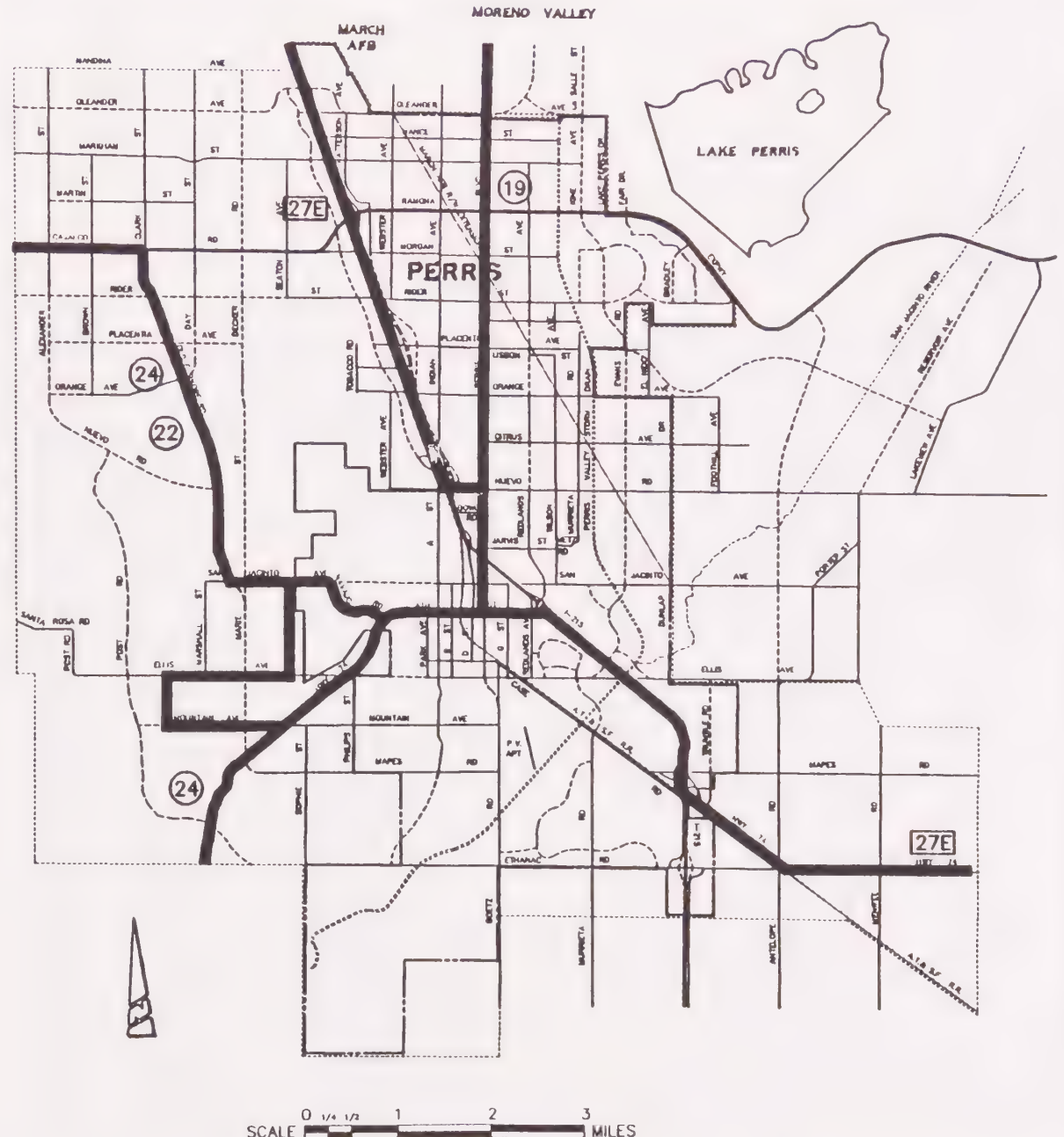
Bus Facilities

Existing bus routes as shown on Figure C-4 will be expanded by the Riverside Transit Agency as required by new development.



- LEGEND**
- SPHERE OF INFLUENCE
 - CITY LIMIT
 - EXISTING BUS ROUTE
 - EXISTING BUS ROUTE NUMBER
 - EXISTING TRANSFER POINT

(24) (T)



EXISTING BUS ROUTES

FIGURE C-4

INFRASTRUCTURE COMPONENT

Water System

Domestic and irrigation services are provided through the City's Water Department and Eastern Municipal Water District. Major off and on-site extension of the water facilities along with payment of appropriate fees are required to provide delivery of the required domestic and fire flow. Installation of dual irrigation systems for all projects is required in order to utilize reclaimed water for irrigation of parks, landscaped medians and planters, etc., once it becomes available.

Sewage System

The entire City is within the service area of the City of Perris and Eastern Municipal Water District, which collects and conveys the sewage through its collector systems to the Perris Treatment Plant. Construction of dry sewage facilities is required for those projects constructing on-site septic systems as provided for by local and State health specifications and standards.

Major on and off-site construction of sewage systems including lift stations and rehabilitation and upsizing of existing sewer mains and treatment plant along with payment of appropriate fees will be required to provide for sufficient level of service.

The waste discharge throughout the City is monitored by Eastern Municipal Water District on a regular basis.

Storm Drain

Several Master Plans are in existence or are at planning stages which require construction of master planned storm drainage and/or nuisance underground facilities along with payment of appropriate drainage fees. Master planned facilities are reviewed and maintained by Riverside County Flood Control and Water Conservation District (R.C.F.C.&W.D.). Non-master planned facilities are maintained by City of Perris Public Works Department through annexation to Flood Control Maintenance District Number One.

R.C.F.C.&W.D. with assistance from the City is responsible to monitor discharge of storm-water runoff to waters of the United States within the Santa Ana Regional Board's jurisdiction.

IMPLEMENTATION PROGRAM

IMPLEMENTATION MEASURES

The City's Circulation Element addresses a range of circulation-related issues areas including the provision of a safe and efficient street system, development of the regional roadway network, efficiency of the circulation system, development of the public transportation system, special intersection geometrics, adequate off-street parking, truck circulation routes, bicycle considerations, and public infrastructure associated with water, sewer, and storm drain systems. Implementation measures are summarized as follows:

MASTER PLAN OF STREETS

1. City/Regional Circulation: Arterial streets within the planned street system will be constructed and maintained according to the Circulation Plan based on standards related to their function and traffic capacity.

Responsible Agency: Public Works/City Engineer/Department of Planning and Development.

Funding Source: Development Fees/Exactions, City Capital Improvements Program and Maintenance Program.

Time Frame: Ongoing

Related Circulation Element Policies: 1.1, 1.2, 1.4, 1.5, 1.6, 3.1

2. Transportation System Management (TSM): To maximize the capacity of the existing and planned traffic system, capital improvements such as restriping, spot widening, and traffic signal coordination will be made.

Responsible Agency: Public Works Department

Funding Source: Development Fees/Exactions, City Capital Improvements Program and Maintenance Program

Time Frame: Ongoing

Related Circulation Element Policies: 1.3, 1.8

3. Transportation Demand Management (TDM): Following the Air Quality Management Plan for the South Coast Air Basin, employers of over 100 employees will be involved in a program aimed at reducing the number of vehicles using the roadway system during peak hours through van-pooling, ride-sharing, staggered work hours and other methods.

Responsible Agency: Public Works Department

Funding Source: Development Fees/Exactions, City Capital Improvements Program and Maintenance Program

Time Frame: Within two years

Related Circulation Element Policies: 1.3, 1.8, 2.3

PUBLIC TRANSPORTATION PLAN

4. Bus Service: The Riverside Transit District (RTD) will offer fixed route service on local and express routes. Park-and-ride facilities will be provided to promote additional express bus service along the freeway corridors.

Responsible Agency: Riverside Transit District/Caltrans

Funding Source: RTD/Caltrans

Time Frame: Ongoing

Related Circulation Element Policies: 2.1, 2.2, 2.4

5. Commuter Rail: A commuter rail station may be established in the future in Perris to support regional commuting trips.

Responsible Agency: Riverside County Transportation Commission

Funding Source: Unidentified

Time Frame: Unidentified

Related Circulation Element Policy: 2.4

NON-MOTORIZED TRANSPORTATION

6. Pedestrian Circulation: Sidewalks exist along most City arterial streets and will be constructed as part of the improvements to new arterial roadways to facilitate safe and convenient pedestrian movement.

Responsible Agency: Public Works Department

Funding Source: Development Fees/Exactions, City Capital Improvements Program and Maintenance Program

Time Frame: Ongoing

Related Circulation Element Policies: 1.2

7. Bicycle Facilities: Class I (paths) and Class II (lanes) bikeways will be maintained and provided along most major streets within the City to promote the use of bicycles. These bikeways will be integrated into the overall County bikeway system.

Responsible Agency: Public Works Department

Funding source: Development Fees/Exactions, City Capital Improvements Program and Maintenance Program

Time Frame: Ongoing

Related Circulation Element Policies: 2.5, 2.6

PARKING

8. Off-Street Parking Requirements: The City's Zoning Ordinance includes off-street parking requirements for various types of development, allowances for parking reductions of development incentives where effective demand management programs are utilized, and allowances for joint use of parking facilities where an appropriate mix uses exists.

Responsible Agency: Department of Planning and Community Development/Public Works Department

Funding Source: Development Fees/Exactions

Time Frame: Ongoing

Related Circulation Element Policies: 4.1, 4.2

TRUCK ROUTES

9. Truck Route Designation: Planned primary truck routes will be identified, signed and improved to accommodate truck travel.

Responsible Agency: Department of Planning and Community Development/Public Works Department

Funding Source: City Capital Improvements Programs and Maintenance Program/Development Fees/Exactions

Time Frame: Ongoing

Related Circulation Element Policies: 1.11

INFRASTRUCTURE

10. Water System: The City's Water Department and Eastern Municipal Water District provide domestic and irrigation service, including use of reclaimed water.

Responsible Agency Department: City Water Department/EMWD

Funding Source: User Fees/Development Fees

Time Frame: Ongoing

Related Circulation Element Policies: None

11. Sewage System: The Eastern Municipal Water District provides sewage collection and treatment services for the City of Perris.

Responsible Agency/Department: City Water Department/EMWD

Funding Source: User Fees/Development Fees

Time Frame: Ongoing

Related Circulation Element Policies: None

12. Storm Drain System: The Riverside County Flood Control and Water Conservation District is responsible for storm drain master planned facilities. The City's Public Works Department maintains non-master planned facilities through annexation to Flood Control District Number One.

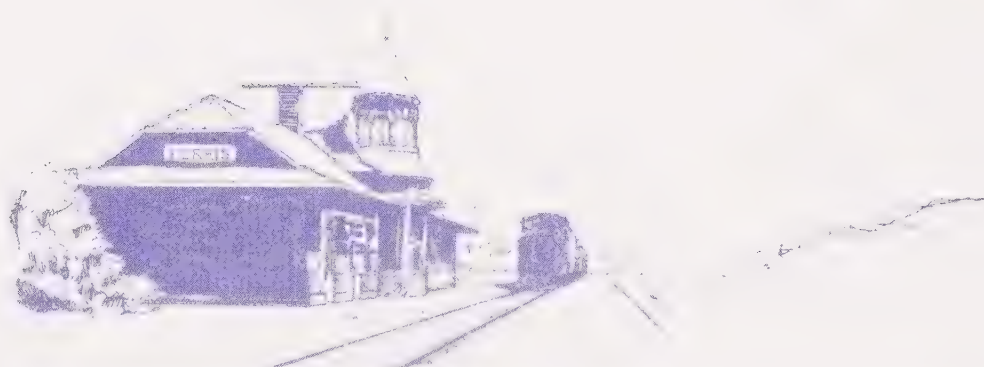
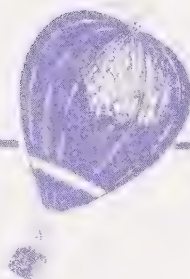
Responsible Agency/Department: RCFC & WD/City Public Works Department

Funding Source: Drainage Fees

Time Frame: Ongoing

Related Circulation Element Policies: None

PERRIS



GENERAL PLAN

CITY OF PERRIS

CONSERVATION/OPEN SPACE/RECREATION ELEMENT

OCTOBER 14, 1991

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INTRODUCTION TO THE CONSERVATION/OPEN SPACE/RECREATION ELEMENT

This Element is concerned with the preservation and use of the City's important natural resources and open space areas. The goals and policies in this Element build upon those in the other elements of the General Plan, especially the Land Use Element. The City's Master Environmental Assessment provides necessary background information and acts as a supporting document for this Element.

The Conservation/Open Space/Recreation Element also addresses the City's park system and includes a trail system plan. Opportunities exist to expand and enhance the recreational components of the City as lands are developed.

PURPOSE OF THIS ELEMENT

Conservation of important natural resources must be considered when accommodating and directing growth within a community. New growth often reduces the amount of open space and, if not properly planned, can encroach on sensitive areas. At the same time, growth represents additional demands for recreation lands and facilities.

The Conservation/Open Space/Recreation Element addresses the conservation and use of the important natural resources and open space areas in the Perris planning area. The goals and policies in this Element build upon those in the other elements of the General Plan, especially the Land Use Element. The City's Master Environmental Assessment (MEA) provides necessary background information and acts as a supporting document for this Element.

The Conservation/Open Space/Recreation Element also addresses the planning area's park and trail system. As the City of Perris develops, its recreational system will expand to accommodate the recreational needs of the City's residents. The recreational component of this Element provides the goals and

policies to establish, enhance, and maintain a recreational system that addresses passive and active recreational needs.

This Element meets State requirements concerning the Conservation and Open Space Elements defined in Sections 65302d and 65302e of the Government Code and described in the California General Plan Guidelines. According to these requirements, the Conservation Element must contain goals and policies that further the protection and maintenance of the State's natural resources, such as water, soils, wildlife, minerals, and other natural resources, and prevents their wasteful exploitation, degradation, and destruction. The Open Space Element must contain goals and policies concerned with managing all open space areas, including undeveloped wilderness lands and outdoor recreation areas. Specifically, open space includes that which is used for the preservation and managed production of natural resources, that which is used for outdoor recreation, and that which is left undeveloped for public health and safety reasons.

RELATED PLANS AND PROGRAMS

There are a number of existing plans and programs which are directly applicable to the aim and objectives of this Element. These plans and programs were enacted through Federal, State, and local legislation and are administered by agencies or special districts that have been delegated with powers to enforce Federal, state and local laws. Federal laws that are concerned with the protection of significant cultural and natural resources include the Endangered Species Act of 1973 (as amended in 1978), the Antiquities Act and the National Historic Preservation Act of 1966.

California Environmental Quality Act Guidelines: The California Environmental Quality Act (CEQA) was adopted by the State legislature in response to a public mandate that called for a thorough environmental analysis of those projects that might adversely affect the environment. The provisions of the law, review procedure, and any subsequent analysis are described in the CEQA Law and Guidelines as amended in 1986. The City of Perris has adopted its own environmental guidelines in accordance with CEQA. CEQA will continue to be instrumental in ensuring that the impacts of all potentially significant projects

are assessed by City officials (both appointed and elected) and the general public.

City of Perris Land Use Element: The City's Land Use Element contains two land use designations that encompass open space land uses: Parks/Recreation/Natural Open Space and Public/Semi-Public Facilities/Utilities. The Parks/Recreation/Open Space land use designation encompasses most of the open space that exists in the City including active and passive parkland and natural open space. The Public/Semi-Public land use designation contains more intensive recreational and/or cultural facilities such as community or cultural facilities, museums, and the Perris Valley Airport.

Air Quality Management Plan for the South Coast Air Basin: Perris is located in the eastern extent of the South Coast Air Basin which is a non-attainment area in that Federal clean air standards prepared by the Environmental Protection Agency have not yet been achieved. In order to achieve these standards, the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) adopted the Air Quality Management Plan (AQMP) in March of 1989. The AQMP identifies strategies designed to improve air quality in compliance with Federal standards.

County of Riverside General Plan: The unincorporated portions of the Perris planning area are in the joint jurisdiction of the City of Perris and County of Riverside. Thus, the goals, policies, and implementation programs in the Riverside County General Plan apply to those lands that are still in the County's jurisdiction. The County's General Plan includes a Conservation and Open Space Element. The goals and policies within the County's elements that are associated with open space and conservation in the Perris area are compatible with those contained in this Element.

Stephen's Kangaroo Rat Habitat Conservation Plan: The County of Riverside has adopted a Habitat Conservation Plan (HCP) for the preservation and management of the Federally-listed endangered Stephen's Kangaroo Rat. The HCP provides for a habitat acquisition program administered by a joint powers authority of which the City of Perris is a member. This element reflects the goals and objectives of the HCP for conservation of the SKR habitat.

FORMAT AND SCOPE OF THIS ELEMENT

In addition to the Element Introduction, this Conservation/Open Space/Recreation Element includes two sections: First, Conservation/Open Space/Recreation Goals and Policies follow this section and identify goals and supporting policies aimed at preserving open space and natural resources in the City. Second, the Element contains both a Conservation/Open Space Plan which is concerned with policies for the preservation and utilization of Perris' natural resources. The Open Space/Recreation Plan focuses on the City's existing and future parkland and the policies/standards for the enhancement and maintenance of its parkland and recreational facilities.

CONSERVATION/OPEN SPACE/RECREATION GOALS AND POLICIES

Conservation of important natural resources must be considered when accommodating and directing growth within a community. New growth often reduces the amount of open space and, if not properly planned, can encroach upon and disturb environmentally sensitive areas. At the same time, economic and population growth represents additional demands for recreational lands and facilities. As the Perris planning area develops, the need to carefully plan for and preserve its undeveloped environmentally sensitive lands becomes increasingly important and necessary to achieve a balance between urban and rural or natural areas.

The undeveloped areas of the Perris planning area include environmentally sensitive lands such as Stephen's Kangaroo Rat habitat, sensitive vegetation, natural resources such as mineral and groundwater resources, significant landforms such as rock outcroppings and steep slopes, and archaeological and cultural resources. These lands are identified and incorporated into the City's overall land use plan so that potential impacts to these resources can be minimized or avoided.

Other natural resources important to the City include air, water, soil, energy, and agricultural resources. Proper land use practices, including conservation measures, ensure that these resources are not degraded or misused. As increasing demands are placed on the City's resources, their long-term viability must be maintained.

The goals and supporting policies included in this Element are concerned with specific issues and opportunities to reduce impacts to the City's remaining sensitive lands and to enhance the open space within the Perris planning area. The City has identified these issues as important to preserving the City's natural resources while accommodating growth. The City's resources can become strained as additional development creates a greater demand on non-renewable energy sources, existing public recreational facilities and services, and significant natural features. Development can affect the agricultural component of the City's economy and character and can encroach upon and divide open space areas, reducing their value for recreational purposes. Development can also take advantage of the City's features such as its drainage channels and natural land forms to provide for visual relief,

recreational uses, and community identity. Significant historical features and important cultural resources should also be assessed for possible preservation.

Some of the goals and policies in this Element are intended to protect the natural resources within the planning area, such as ground and surface waters, air and energy resources, and others are intended to conserve significant land forms that define the planning area's aesthetic character. Other goals and policies serve to protect the planning area's environmentally sensitive lands and cultural resources, and to take advantage of recreational and open space opportunities that augment the City's existing recreational lands.

CONSERVE AND PROTECT WATER RESOURCES

The City's planning area contains both surface and groundwater resources that provide both irrigation and recreation needs. The City of Perris depends primarily on imported water which highlights the importance of preserving its local water resources, particularly during times of drought. Urban runoff and chemical or sewage discharge into the City's water table or surface streams can impact local water resources unless measures are taken to protect them.

GOAL 1: Conserve and protect surface water, groundwater, and imported water resources.

Policy 1.1: Local drainage courses, channels and creeks should be retained in their natural condition, where possible.

Policy 1.2: Assist other responsible public agencies in eliminating the discharge of toxic materials and untreated sewage into the area drainage and groundwater system.

Policy 1.3: Protect groundwater and surface water resources from depletion and sources of pollution.

Policy 1.4: Conserve imported water by requiring water conservation techniques, water-conserving appliances, drought-resistant landscaping, and reclaimed water for irrigation, when available and appropriate.

Policy 1.5: Conserve and protect watershed areas in the westerly mountainous portion of the planning area by limiting development, and retaining natural vegetation and open space.

Policy 1.6: Participate in the EMWD water reclamation program for public open space irrigation.

Policy 1.7: Require new developments to provide plumbing for reclaimed water use.

CONSERVE AND PROTECT EARTH RESOURCES

The City's earth resources include significant land forms, minerals and soil resources. Hillsides exist mainly in the western portion of the planning area and major rock outcroppings exist throughout the planning area. These landforms represent aesthetically pleasing features that offer variation to the landscape. The planning area's hillsides and rock outcroppings should not just be preserved, but should be incorporated into the City's development plan as unique design features.

The City's mineral resources include rock, clay, and gypsum which may be designated as important statewide mineral resources as these minerals become more scarce. Lands that are impacted by mining must be reclaimed pursuant to state law.

GOAL 2: Conserve and protect significant land forms, important watershed areas, mineral resources and soils conditions.

Policy 2.1: Conserve hillsides and rock outcroppings in the planning areas through the use of planned developments which encourage the creative siting of building areas as a means of retaining open space.

Policy 2.2: Conserve mineral resources identified by the State Mining and Geology Board by limiting or phasing development in the areas of the most desirable mineral extraction sites.

Policy 2.3: Lands impacted by mining shall be reclaimed pursuant to the State Surface Mining and Reclamation Act.

Policy 2.4: Require and practice proper soil management techniques to reduce erosion, sedimentation and other soil-related problems.

Policy 2.5: Control erosion during and following construction through proper grading techniques, vegetation replanting, the installation of proper drainage control improvements.

CONSERVE AND PROTECT PLANT AND ANIMAL COMMUNITIES

Several areas within Perris' planning areas contain sensitive habitat that supports plants and animals considered rare, threatened, or endangered by federal and state agencies. Of primary importance, is the federally designated endangered Stephen's Kangaroo Rat which relies on much of the grasslands throughout western Riverside County for its survival. Three SKR reserve study sites in the Perris planning area have been identified by the County and permanent habitat reserves will be acquired for this threatened species through a joint powers agreement program between the County and surrounding cities, including Perris. The program will include the acquisition and management of habitat to ensure survival of the rat.

Other important wildlife habitats in the planning area include riparian areas, wildlife movement corridors, wetlands, woodlands, and scrub lands. Sensitive development practices, including habitat enhancement plans, can reduce impacts to these habitats, thus protecting the species themselves.

GOAL 3: Conserve and protect natural plant and animal communities.

Policy 3.1: Conserve and protect important plant communities and wildlife habitats, such as riparian areas, wildlife movement corridors, wetlands, oak woodlands and other significant tree stands, and rare or endangered plant/animal species by using buffers, creative site planning, revegetation, and open space easements/dedications.

Policy 3.2: Require development proposals in areas expected to contain important plant and animal communities to include biological assessments identifying species types and locations.

Policy 3.3: Allow new development to remove only the minimum natural vegetation and require revegetation of graded areas with native plant species consistent with public safety requirements.

Policy 3.4: Support programs to consolidate public lands as a means of preserving natural habitats.

CONSERVE ENERGY RESOURCES

The Southern California Edison (SCE) and Southern California Gas (SCG) Companies provide electricity and natural gas to the Perris planning area. The demand for energy has increased significantly with the growth occurring in the planning area. To ensure a stable energy supply and minimize demands on energy resources, the City will implement energy conservation measures.

GOAL 4: Conserve energy resources through use of available energy technology and conservation practices.

Policy 4.1: Encourage innovative building, site design and orientation techniques which minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping, and building materials available to control energy usage.

Policy 4.2: Maintain local legislation to establish, update, and implement energy performance building code requirements established under State Title 24 Energy Regulations.

CONTROL FLOODING HAZARDS

Flooding can cause serious harm to a community, including loss of life and property. Federal, state, and local laws and regulations have been enacted to require identification of flood hazard areas and to utilize special development practices to reduce flooding hazards and to minimize uncontrolled storm water diversion. The maintenance of the City's existing storm channels by the Riverside County Flood Control and Water Conservation District will also keep flooding hazards to a minimum.

GOAL 5: Control flooding to reduce major losses of life and property.

Policy 5.1: All proposed development within identified flood hazard areas shall comply with the City's Floodplain Manage-

ment Regulations and criteria for the Federal Flood Insurance Program.

Policy 5.2: Ensure that adequate building site area outside of natural drainage courses is provided for in all proposed land divisions.

Policy 5.3: Ensure that development does not divert storm water run-off onto adjacent properties, or cause alterations of natural drainage courses that cannot be adequately handled by flood control improvements installed coincident with the development.

Policy 5.4: Cooperate with the Riverside County Flood Control and Water Conservation District and the Federal Emergency Management Agency to ensure that land uses and development proposed within major floodplain areas are consistent with planned improvements and the timing of their installation.

Policy 5.5: The use of interim drainage facilities, and open channels that are not a part of a Master Plan Flood Control Facility, should be discouraged and will be allowed only at the discretion of the City. Master Plan flood control facilities shall be used to the greatest extent possible.

CONSERVE AGRICULTURAL LANDS

Agriculture is an important part of Perris' history. As the demand for residential and commercial uses has increased, agricultural land in the Perris planning area has been converted to urban uses, but lands still remain in agricultural production. As Perris develops into a more urban community, it is important to recognize the continued role that agricultural operations play in the Perris area and to avoid the premature conversion of agricultural lands. The extension of urban infrastructure into large areas still in agricultural production can encourage the premature conversion of these lands, constraining the City's resources and infrastructure.

Compatibility issues can occur when urban uses are introduced into areas that still contain agricultural uses. Agricultural conversion can be done in a sensitive manner to ensure that agricultural operations are not pressured into retiring premature-

ly and that the agricultural use is not seen as a public nuisance. The integration of buffer areas into project design is one way in which land use compatibility may be maintained.

GOAL 6: Conserve and avoid premature conversion of agricultural lands to urban uses.

Policy 6.1: Avoid the premature conversion of agricultural lands to urban uses by approving incremental development which is contiguous to existing urbanized lands.

Policy 6.2: Discourage proposed development which would extend urban infrastructure into large-scale agricultural production areas to avoid premature conversion of agricultural land to urban use.

Policy 6.3: Ensure the compatibility of agricultural and residential/agricultural uses with adjacent urban uses by requiring new development to provide extensive separating buffer areas with landscaping, earthen berms, or other physical barriers.

Policy 6.4: Encourage the use of sound agricultural practices to minimize the disturbance of the natural environment while maximizing production capabilities.

REDUCE AIR POLLUTION

The maintenance of good air quality is important to the health and aesthetics of an area. Evidence that poor air quality can cause deterioration people's health, particularly for children and the elderly, and reduce the longevity of buildings and plant and animal life warrants the protection of ambient air quality as a resource. Many of the City's residents currently travel outside of the Perris area to work. This contributes to non-stationary pollution, the main source of the area's poor air quality. However, the City's employment base is increasing in size which is providing more opportunities for residents to work within the City limits, effectively reducing automobile emissions.

Unfortunately, the Perris area receives much of its air pollution from the Los Angeles area due to prevailing winds that transport pollutants from the west to the east basin which then become trapped against the mountains to the east of Perris. The

cooperation of the entire South Coast Air Basin from a regional perspective is needed to reduce air pollution. The City will comply with the South Coast Air Quality Management District's Air Quality Management Plan and engage in prudent planning practices to help to eliminate poor air quality from its planning area.

GOAL 7: Reduce air pollution through proper land use, transportation, and energy use planning.

Policy 7.1: Locate neighborhood commercial centers within close proximity to residential areas to shorten and reduce shopping trips.

Policy 7.2: Locate multiple-family residential developments in convenient proximity to commercial areas to encourage pedestrian, rather than vehicular travel.

Policy 7.3: Develop neighborhood parks within close proximity to concentrations of residents to encourage pedestrian travel to recreation facilities.

Policy 7.4: Develop a balance of land uses within the planning area to promote a reduction of distance between population residence and work place.

PROTECT OPEN SPACE AREAS

Open space includes those areas that contain sensitive plant and animal habitat; archaeological, historic, and paleontological resources; unique geographic features; and mineral resources. The City will ensure that lands containing important natural resources are not impacted by development by implementing protective measures, sensitive planning practice, and acquisition and dedication programs.

GOAL 8: Protect open space areas to preserve natural resources.

Policy 8.1: Encourage in-fill and contiguous development to preserve outlying open space areas.

Policy 8.2: Designate and acquire important open space lands such as endangered plant and animal species habitats, and land containing unique geographic features, through dedication or other means of acquisition.

Policy 8.3: Protect important mineral resources by maintaining their locations in open space.

Policy 8.4: Protect significant historical sites or structures, identified in the City's MEA, by offering programs and/or incentives to preserve, restore, or reuse the structures while maintaining their historical significance and integrity.

Policy 8.5: Require development proposals that are located on or near archaeological or paleontological resources to provide a cultural resources study that assesses potential impacts to the resource as a result of the proposed development. The report will include measures to avoid destruction of significant cultural sites.

Policy 8.6: Maintain the City's historical past by integrating historical artifacts and features into new development.

DEVELOP AND MAINTAIN A BALANCED PARK SYSTEM

Perris' park system is expanding as new development occurs in the City's planning area. Because the City's population is rapidly increasing, enhancement and expansion of the City's park system is required to keep pace with demand. The existing parks also require maintenance and linkage to new parks to form an community-wide park system. County parks and State reserves provide passive and active recreational opportunities for City residents. Local parks within the community that contain active playfields and children's playgrounds provide local neighborhood recreational opportunities.

To achieve a well balanced park system, the City will establish a minimum of three acres of local parkland per 1,000 residents, which equals 400 acres at a build-out population level. The City needs to expand its current park system so that it can serve its residents with a variety of recreational opportunities. Parkland standards will ensure the provision of an adequate supply of parkland throughout the planning area. Special open space

opportunities, such as joint school/park uses and the use of corridors to link open space areas will be utilized to form a contiguous open space system.

GOAL 9: Develop and maintain a balanced system of public and private park and recreational facilities.

Policy 9.1: Provide active and passive park and recreational facilities, based on the distribution of population within the planning area, to serve the needs of residents of all ages, economic levels, and physical conditions.

Policy 9.2: Upgrade existing parkland facilities to improve park utilization and appearance.

Policy 9.3: Utilize opportunities for joint use of public facilities for recreational purposes, such as schools, flood control channels, and land areas under the jurisdiction of other public agencies.

Policy 9.4: Actively pursue all available sources of financing for parkland acquisition and maintenance.

Policy 9.5: Encourage the development of private recreational facilities, such as the Perris Valley Airport and its associated uses, the Orange Empire Railway Museum, and the Hot Air Balloon Park, when appropriate, to increase recreational opportunities of residents.

Policy 9.6: Manage public passive recreational open space lands to optimize limited use, while avoiding natural environmental disruption.

Policy 9.7: Designate open space land as public and private active/passive recreational areas.

Policy 9.8: Link open space areas using drainage courses, utility easements, and parkways adjacent to streets to form a system of recreational trails for pedestrians and equestrian use that is separate from the automobile.

Policy 9.9: Develop a Park/Trail Master Plan which identifies planning area needs and maintenance and phasing of park/trail systems.

THE CONSERVATION/OPEN SPACE PLAN

The undeveloped portions of the Perris planning area offer opportunities for preservation and use. Some of these lands contain natural resources, some contain constraints that make them difficult to develop, and some provide potential connections to regionally significant open space uses. The Conservation/Open Space Plan identifies those lands that either contain natural resources to be conserved and managed and open space that should be preserved to protect the public health and safety. The goals and policies contained in this Element reflect ways in which these lands can benefit the City by representing open space for community residents.

This Plan also identifies ways in which the City will conserve its water and energy resources while allowing the City to develop in a controlled manner.

CONSERVATION/OPEN SPACE FOR THE PRESERVATION AND MANAGED PRODUCTION OF NATURAL RESOURCES

Figure COSR-1 identifies those lands that represent the natural resources within the Perris planning area. The natural resources include slopes over 30 percent grade, rock outcroppings, sensitive vegetation (riparian and Stephen's Kangaroo Rat habitat), lands that may contain sensitive archaeological resources and mineral resources. As can be seen by Figure COSR-1, the natural resources are scattered over a large portion of the planning area.

Significant Landforms

Most of the Perris planning area is topographically level although the western portion gently slopes upward toward the hillsides at and beyond the planning area boundary. A few steeply sloped lands exist in this western extent. Because of Perris' relatively flat terrain, the hillsides to the west and east offer a pleasing backdrop that defines the Perris Valley. These steeply sloped lands also provide habitat to several species

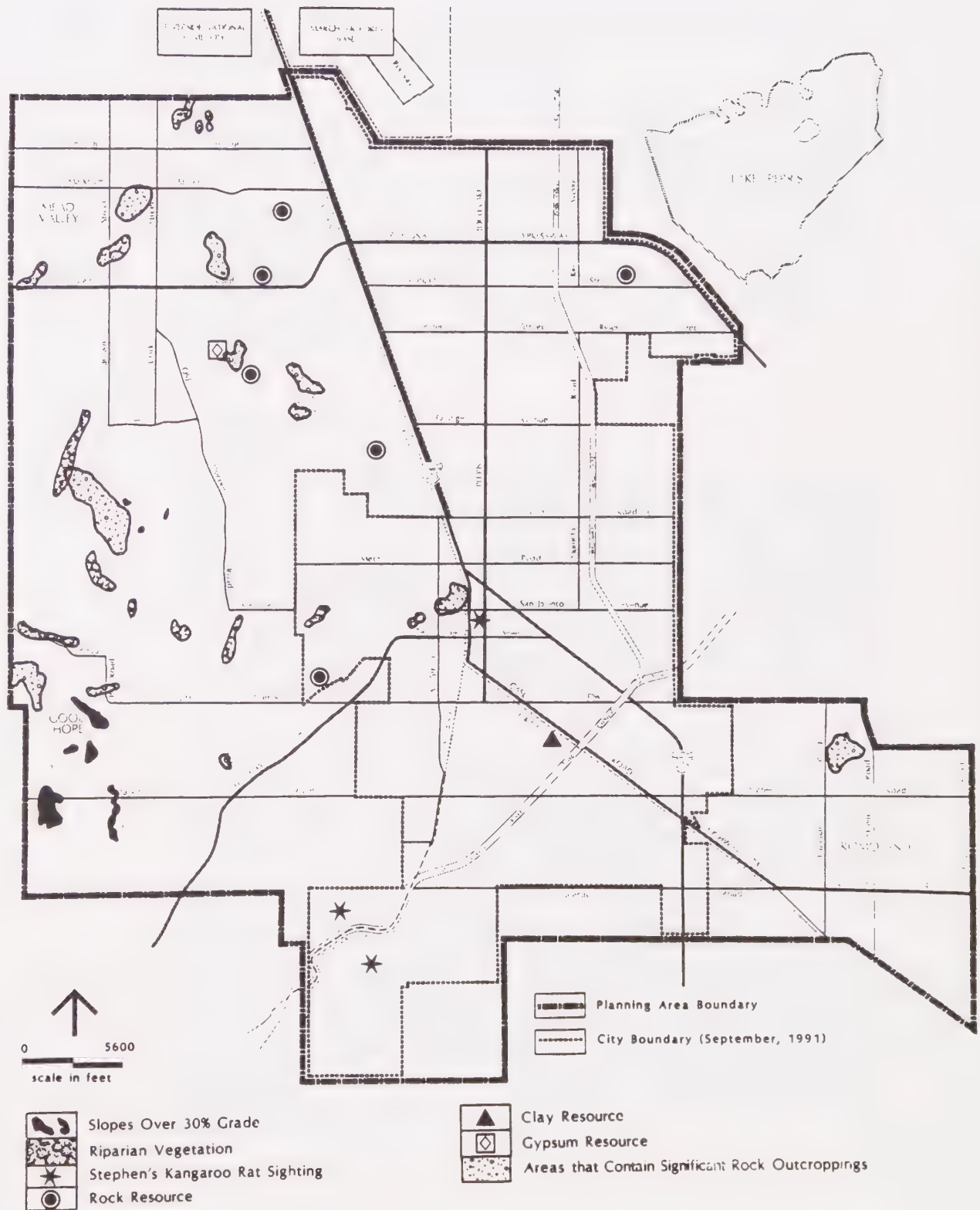


Figure COSR-1
Natural Resources within the
Perris Planning Area

OCTOBER 14, 1991

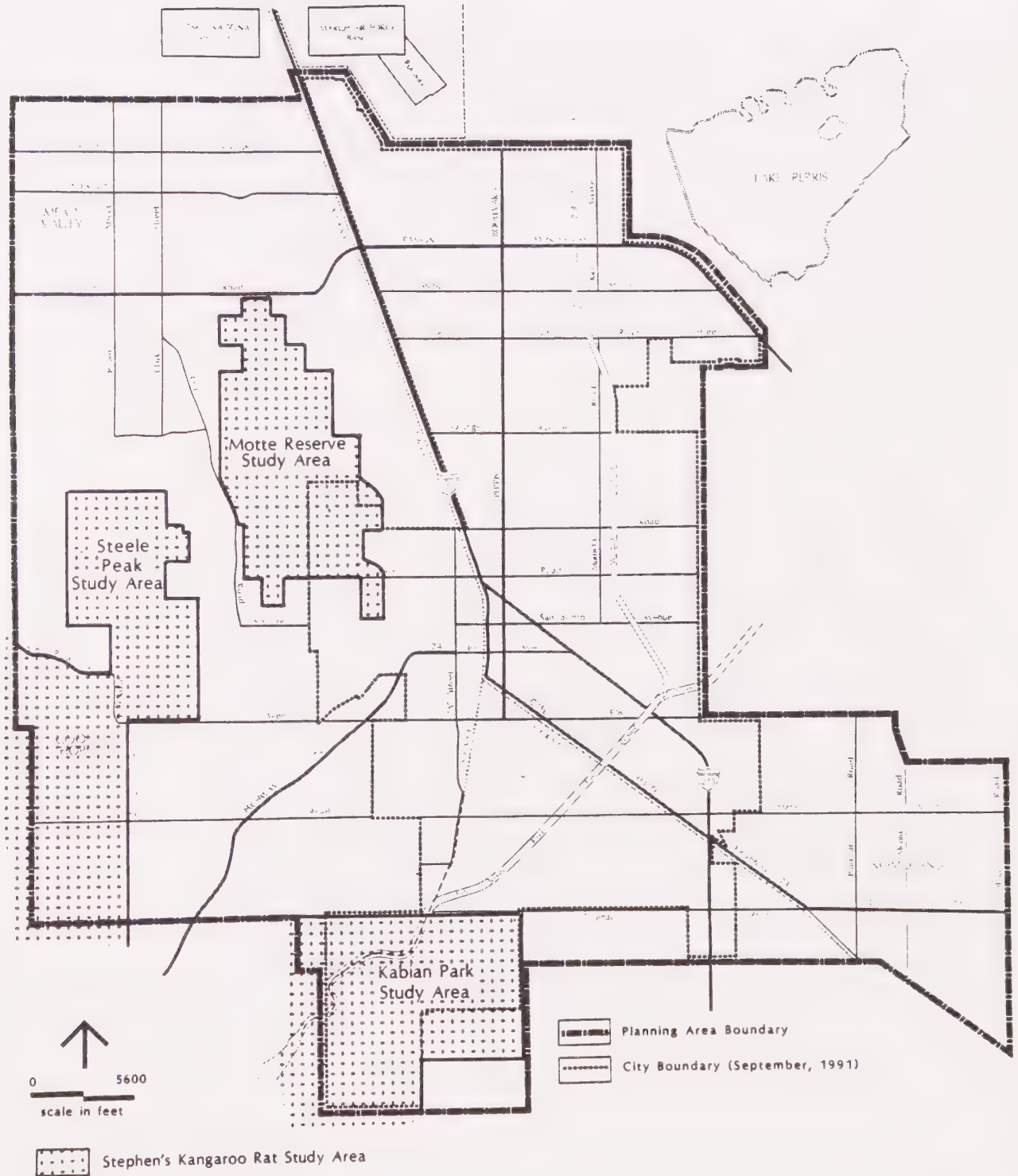
of birds and animals. Development within the hillside areas should be approached sensitively so as not to disturb the ridgelines and hilltops in this area.

Figure COSR-1 also identifies the rock outcroppings in the Perris planning area which represent an aesthetic characteristic of the Perris Valley landscape. These rock outcroppings are especially prevalent in the western portion of the planning area as boulders erupting from the level grassy terrain. The policies contain within this Element serve to protect the planning area's significant rock outcroppings by requiring development to integrate them into development design plans rather than destroying or ignoring this aesthetic resource.

Sensitive Habitat

The biological setting of the Perris planning area is described in detail in the City's MEA. The sensitive habitat in the Perris planning area consists of riparian vegetation as linear strips or stands of sycamores, willows, cottonwoods, and elderberry. This vegetation type can be found along the San Jacinto River water course and ephemeral streams within the western hillsides. Riparian habitat support the sensitive plant species *Brodiaea filifolia* or *Thread-leaved brodiaea*. Many birds and wildlife rely on the riparian areas as a food and water source.

Grasslands within the Perris planning area support other animals considered sensitive such as the Ferruginous hawk and other raptors. The most sensitive of these species is the Stephen's Kangaroo Rat (*Dipodomys stephensi*) which is designated as endangered by the U.S. Fish and Wildlife Service. The City of Perris is participating in a joint powers agreement between surrounding cities in Riverside County and the County of Riverside to acquire habitat lands for the Kangaroo Rat as part of the County's Habitat Conservation Plan. Figure COSR-2 identifies three areas in the Perris planning area for potential permanent reserves. These lands contain grassland and sparse coastal sage scrub that provides habitat for the Stephen's Kangaroo Rat. Mitigation fees are also collected by the cities participating within the joint powers agreement to acquire lands within these future reserve areas.



Mineral Resources

Mineral resources within the Perris planning area include rock, clay, and gypsum resources as identified by the County of Riverside and the California Department of Conservation, Division of Mines and Geology. The Division of Mines and Geology also identifies Mineral Resource Zones (MRZ) within Riverside County, although none of these mineral zones currently exist in the Perris planning area. The State is updating their mineral resource maps which may include the addition of new Mineral Resource Zones. The City of Perris will recognize and conserve those important mineral resources that are identified by the State Department of Conservation, as indicated by Goal 2 and Policies 2.3 and 2.4 in this Element.

Water Resources

The hydrology of the Perris planning area is described in the City's MEA. The MEA also contains a description of the City's potable water distribution system. The Perris Valley carries water from the San Jacinto Mountains east of Perris to Lake Elsinore along the Perris Valley Storm Drain and the San Jacinto River. These river courses confine storm waters to protect the City's residences and they also can provide linear open space linkages to other open space areas. The other major surface water resource in the Perris area is Lake Perris which is important from a regional recreational standpoint.

Groundwater in the Perris planning area is no longer used for domestic purposes due to the high level of salts present in the water from irrigation runoff. The City's MEA describes the content of dissolved solids in the local groundwater basins representing the degradation of water quality. As agricultural uses decrease in the planning area, the amount of dissolved solids in the groundwater may be reduced. Goal 1 and Policies 1.1 through 1.4 of this Element serve to protect the surface and groundwater resources in the planning area.

Air Resources

The Perris MEA includes a description of the climatology and air quality in the Perris planning area. The Perris planning area is located near the eastern boundary of the South Coast Air Basin (SCAB) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD and the Air Resources Board are responsible for air pollution control in the SCAB. The Southern California Association of Government (SCAG) and the SCAQMD have adopted the Air Quality Management Plan (AQMP) to comply with the California Clean Air Act. The main source of air pollutant emissions in the planning area is generated by mobile sources which create the pollutant ozone. The AQMP contains stringent control measures to improve the air quality in the SCAB which include transportation management plans and air pollutant regulations. The City of Perris will comply with the AQMP as illustrated by the policies within this Element.

CONSERVATION/OPEN SPACE FOR PUBLIC HEALTH AND SAFETY

As an incorporated city, Perris must protect the health and safety of its residents. This involves the identification of lands that pose a threat to health and safety and the implementation of proper planning techniques to minimize potential threats to health and safety. Figure COSR-3 depicts the lands in the City that require special planning considerations to avoid those potential impacts. These lands include the 100-year floodplain zones, dam inundation areas, and slopes over 30 percent grade.

Floodplain zones, as identified by the Federal Emergency Management Agency, exist along both the Perris Valley Storm Drain and the San Jacinto River Channel. Improvements to the flood channels in the City, by the Riverside County Flood Control and Water Conservation District, have decreased the extent of the 100-year floodplain so that fewer developed areas are susceptible to flooding. Areas that are susceptible to inundation in the event of a dam failure at either the Little Lake Reservoir in Hemet, Pigeon Pass Reservoir, and the Lake Perris Reservoir are also shown in the Figure COSR-3. Figure COSR-3 represents a "worst case" scenario which would result if all of the dams upstream from the Perris Valley ruptured.

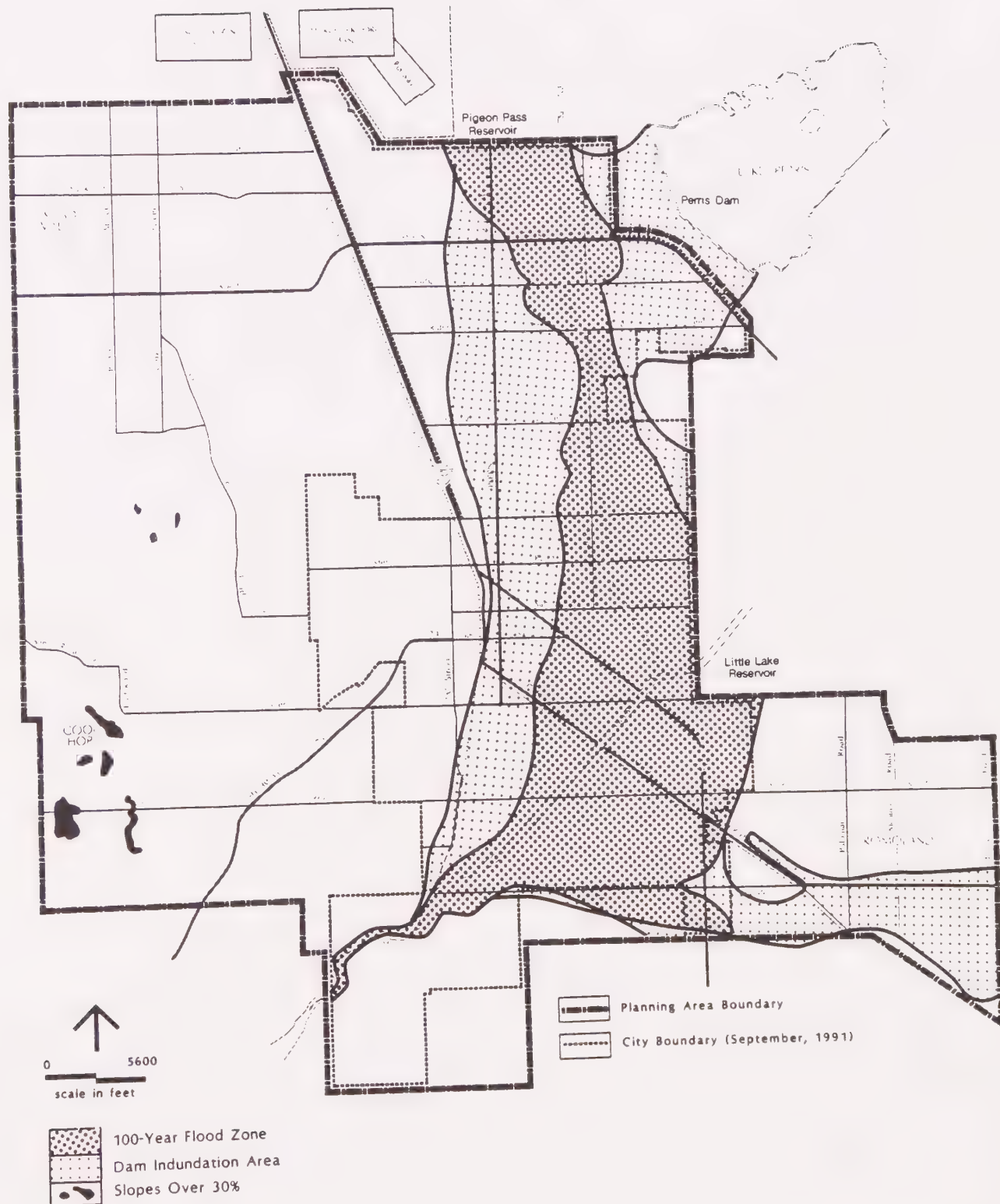


Figure COSR-3
Open Space for
Public Health and Safety

OCTOBER 14, 1991

The dam inundation areas cover a large portion of Perris east of the A.T.&S.F. railway. The City's Public Safety Element further addresses the occurrence of these dam inundation events. Goal 5 and Policies 5.1 through 5.5 ensure the reduction of major losses of life and property from flooding occurrences.

The hillsides to the west of Perris contain a few slopes over 30 percent grade which represent a constraint to traditional development practices. The steeply sloped land in this area of the Perris planning area provides an aesthetic resource and some variation in the otherwise level terrain. Development within these hillsides may also cause severe erosion and sedimentation impacts if proper grading techniques are not implemented. Policies 2.5 and 2.6 require special planning techniques to minimize impacts to hillsides.

THE OPEN SPACE/RECREATION PLAN

Open space and recreational facilities play an important role in the vitality of a community. The open space/recreational system in the Perris planning area contains a good representation of large, passive open space areas as well as small neighborhood parks that contain more active recreational facilities. Perris is also located adjacent to a regionally significant open space resources. As Perris grows, the City will expand and enhance its existing open space/recreational system so as to provide a variety of recreational opportunities to its new and established residents.

The purpose of the Open Space/Recreation Plan is to identify and provide for the parks and recreational needs of all segments of the planning area's population. The Plan provides a framework for the future provision of both active and passive parks, a city-wide system of trails, and community service facilities that provide recreational programs and cultural activities.

RELATION TO LAND USE PLAN

The City's Land Use Plan places parkland and recreational facilities into the category Parks/Recreation/Natural Open Space. Other, more intensive recreational facilities are also within the land use category of Public/Semi-Public Facilities. The following is a description of each of these land use designations.

Parks/Recreation/Natural Open Space

Parks/Recreation land use designation applies to all passive and active park or recreation areas whether private or public, in the City. Active recreation activities include community recreation facilities, equestrian centers, golf courses/driving ranges, indoor/outdoor athletic facilities, and public parklands. Passive activities include natural preserves, designated open space, museums, galleries, or similar cultural/historical centers. The maximum floor area ratio for land use in this category will be up to .25:1.

Public/Semi-Public Facilities/Utilities

This designation includes a wide range of public, quasi-public, and private uses such as school sites, government administrative offices and facilities, public utilities, institutes of higher learning, religious institutions, libraries, hospitals and cultural and recreational activities. These uses are distributed throughout the city. The maximum floor area ratio for land use in this category will be up to .5:1.

PARKS AND RECREATION COMPONENT

The Open Space/Recreation Plan establishes a classification system that applies to all existing and future parks and recreation facilities in the Perris planning area. The overall Open Space/Recreation Plan is illustrated in Figure COSR-4 and Tables COSR-1, COSR-2, and COSR-3 which provide a listing of all existing and future parklands. Additional local parks are also identified on Figure COSR-4 where a perceived need exists based on future population. These potential future local parks depict general areas where a community park and associated neighborhood parks should be located based on the need of future residences for recreational opportunities. Although the future parklands located on Figure COSR-4 are generalizations and not site specific, they indicate focused areas as part of the City's future parks and recreation master plan. General standards have been developed for future parkland components based on spatial requirements, function, service area, and desired improvements as identified in Table COSR-4.

Local Parks

The local parks within the Perris planning area include both neighborhood and community parks. The minimum City-wide standard of three acres per 1,000 population for the provision of future parkland is based on Section 66477 of the Subdivision Map Act (also referred to as the Quimby Act). Future local parkland must also meet the criteria established in the Open Space/Recreation Plan. The individual parkland standards as described in this Plan are contained in Table COSR-4.

Neighborhood Parks: A neighborhood park is any general use local park developed to serve the active recreational needs of a particular neighborhood within a community. Neighborhood parks will range in size from 2 to 20 acres and are intended to serve the community within a radius of approximately 1/2 mile, usually within walking or cycling distance of park patrons. Neighborhood parks will generally be active sites featuring such amenities as active ball fields, multi-purpose playfields, game courts, children's play areas, lighting for night use, and on-site parking facilities. Where appropriate, neighborhood parks should be located adjoining an elementary school and near the center of a neighborhood unit. Finally, a neighborhood park should not be separated from its user population by major highways, railroads, or untraversable obstacles.

Community Parks: A community park should be between 15 and 50 acres in size generally designed to meet the active recreational needs of several neighborhoods. These parks are intended to serve pedestrian and motorists within a radius of up to three miles. They contain facilities which require more space than neighborhood parks which may include: multi-purpose playfields, court sport facilities, swimming pools, and community centers with adequate on-site parking. Community parks may also include passive uses such as nature areas and picnic facilities and should be linked, via pedestrian, bicycle or equestrian trails, to other open space uses.

Other Parks

In addition to the local parks described above, the Perris planning area also includes regional parks, nature preserves, private parkland, and joint park/school uses. These types of parkland, although not included in the City's parkland standards, provide an important open space component to the Open Space/Recreation Plan.

Regional Parks: A regional park is designed to serve a regional population and usually consists of a special feature that a jurisdiction wishes to preserve. No specific standards apply to this parkland category other than a recognition of their unique function in preserving significant natural ecological areas. The Kabian County Park and Wilderness Area is a 640-acre regional park located partially within the Perris planning area and is managed by the County Parks Department.

The Perris planning area is also adjacent to the Lake Perris State Recreation Area. This regional resource is not included in Perris' Open Space/Recreation Plan, but it provides a unique open space opportunity to Perris residents. Lake Perris contains 8,800 acres of open space surrounding the reservoir. The park offers camping, boating, fishing, hiking, hunting, and beaches.

Nature Preserves: Perris is fortunate to have two large nature preserves within its planning area. These nature preserves provide natural, undeveloped land for passive recreational use such as hiking, bird watching, and enjoyment of the scenery and wildlife. Both reserves are owned and/or managed by the University of California, Riverside. The 1,270-acre Motte Rimrock State Reserve and Wildlife Reserve is located within the western extent of the City boundaries. The reserve provides biological habitat for many species of birds and animals and contains archaeological and paleontological resources. The second nature preserve located in the Perris planning area is the 800-acre Steele Peak Reserve which provides habitat for many animal species including the Stephen's Kangaroo Rat.

Private Parkland: The Perris planning area will also contain some privately-owned parkland developed within a subdivision exclusively for the use of the development's residents. These facilities and parks, not accessible to the general public, are typically maintained by a home owners association. Private parkland represents a component of the City's parkland system, however, they should not be credited against developer agreements for the dedication of public parkland or related fees.

Joint Park/School Uses: Opportunities exist to expand the combined use of schools and adjoining park sites to provide more recreational area for students and to increase the City's park system.

Open Space Linkages

Open space linkages are usually linear strips of open space along lands such as easements and floodplain. The purpose of these linkages are to connect other open space areas and parkland through open space corridors. Pedestrian and bicycle or equestrian trails are usually located along open space linkages. The Perris planning area has open space linkages along both of its floodplain channels and along the MWD easement and railroad

easement. These open space linkages form an important component to the Open Space/Recreation Plan as they provide the backbone to the overall open space system.

Trails

Policies 9.8 and 9.9 of this Element encourage the expansion and enhancement of a planning area-wide system of hiking, biking, and equestrian trails. Trails, along the San Jacinto River, Perris Valley Flood Control Channel, Romoland Channel, and easements will link regional open space uses to neighborhood and community parks and open space. The trail system follows the open space linkages connecting local parks to regional open space.

The City's trail development standards will be provided in the City's Master Trails Plan. Figures COSR-5 and 6 provide an illustration of the different types of trails to be designed in the Perris planning area. These trails will offer multi-model opportunities for pedestrians, bicyclists, and equestrians. The designated trails within the planning areas are:

San Jacinto River Regional Trail: This trail follows the San Jacinto storm channel and will ultimately connect the Canyon Reservoir through to Lake Perris and eventually to the San Bernardino National Forest. The County of Riverside designates this trail as a primary riding and hiking trail.

Ramona Expressway Trail: This regional trail follows the Ramona Expressway which connects Lake Perris to Lake Mathews. The County of Riverside recognizes this trail as a primary riding and hiking trail.

Other Recreational Opportunities

In addition to parkland and open space within the planning area, other more intensive recreational opportunities are available to Perris residents. These include cultural facilities and the City's reputation as an internationally known skydiving and hot air ballooning site. The community facilities that contain recreational opportunities are designated on the City's Land Use Map as Public/Semi-Public and are also shown on the Open Space/Recreation Plan Map (Figure COSR-4). Facilities such

as the Orange Empire Railway Museum and the Perris Valley Airport will be preserved as part of this Plan.

**TABLE COSR-1
EXISTING LOCAL PARKLAND INVENTORY**

| | NAME | GROSS ACREAGE | FACILITIES |
|----|----------------------------------|---------------|--|
| 1L | Banta Beatty Senior Citizen Park | 1.16 | Senior citizen center, grass, picnic area |
| 2L | Banta Beatty | 6.41 | Gymnasium, youth center |
| 3L | Bob Long Memorial | 4.41 | Baseball fields, stands |
| 4L | Civic Center | 4.62 | Ballfield |
| 5L | Copper Creek | 7.39 | Picnic, future playground |
| 6L | Metz Rentention Basin | 17.84 | Future ballfields, picnic, on-site parking |
| 7L | Rusell Stewart | 3.15 | Tot-lot, picnic |
| 8L | Triple Crown | <u>14.10</u> | Tennis courts, future ball fields, landscaped open space |
| | TOTAL EXISTING LOCAL PARKLAND | 59.08 | |

**TABLE COSR-2
EXISTING NATURE RESERVES AND REGIONAL PARKS**

| | NAME | GROSS ACREAGE | OWNERSHIP/MANAGEMENT |
|-----------------|-----------------------------|---------------|---|
| NATURE RESERVES | | | |
| 1R | Motte Rimrock | 1,270.0 | University of California, Riverside and BLM |
| 2R | Steel Peak | 800.0 | BLM |
| REGIONAL PARKS | | | |
| 3R | Kabian County Park | 640.0 | County of Riverside |
| 4R | Lake Perris Recreation Area | 8,800.0 | State of California |

**TABLE COSR-3
FUTURE PARKLAND INVENTORY**

| TYPE/NAME | | GROSS ACREAGE | FACILITIES |
|---------------------------------|---------------------------------|---|--|
| NEIGHBORHOOD PARKS | | | |
| 1FN | Green Valley | 5.0 | To be designed |
| 2FN | Green Valley | 5.0 | To be designed |
| 3FN | Green Valley | 5.5 | To be designed |
| 4FN | Green Valley | 5.0 | To be designed |
| 5FN | May Ranch # 1 | 9.0 | Bellfields, picnic area |
| 6FN | May Ranch # 2 | 8.0 | Ballfields, play area, picnic, tot-lot |
| 7FN | May Ranch # 3 | 10.0 | Ball courts picnic |
| 8FN | May Ranch Linear Park | 14.0 | To be designed |
| 9FN | McCanna Ranch | 4.5 | Ballfields, play area, picnic |
| 10FN | McCanna Ranch Linear Park | 6.8 | To be designed |
| 11FN | Riverwood PA7 | 5.3 | Natural open space |
| 12FN | Riverwood PA6 | 8.9 | Ballfields, tot-lot |
| TOTAL FUTURE NEIGHBORHOOD PARKS | | 87.0 | |
| COMMUNITY PARKS | | | |
| 1FC | Green Valley | 30.6 | To be designed |
| 2FC | Green Valley Linear Park | 35.2 | To be designed |
| 3FC | Menifee Ranch Parks | 58.0 | |
| 4FC | Parkwest Linear Park | 20.0 | To be designed |
| TOTAL FUTURE COMMUNITY PARKS | | 143.8 | |
| OPEN SPACE | | | |
| 1OS | MWD Easement | 58.0 | Trail |
| 2OS | San Jacinto River Flood Channel | Approximately 130 feet on both sides of channel (184.0) | Trail |
| 3OS | Perris Valley River Channel | Approximately 130 feet on both sides of channel (148.0) | Trail |
| 4OS | MWD Detention Basins | 390.0 | To be designed |
| 5OS | New Perris | 49.0 | To be desined |
| 6OS | Kabian Hills/Easement | 213.0 | To be designed |

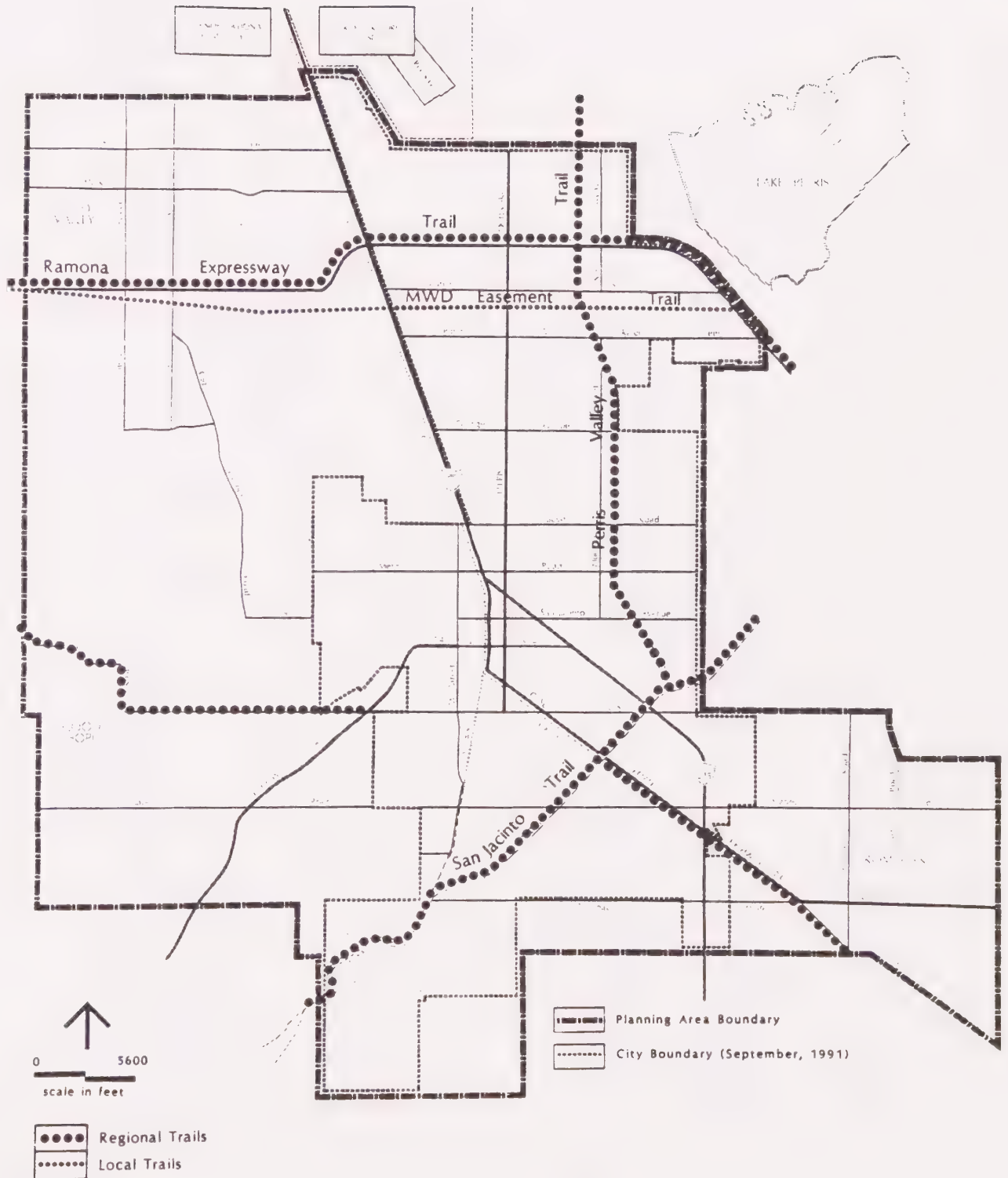
**TABLE COSR-3
FUTURE PARKLAND INVENTORY
(Continued)**

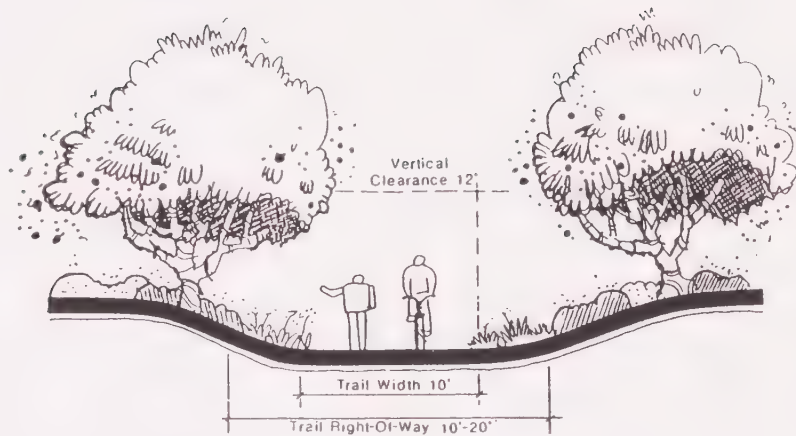
| TYPE/NAME | | GROSS ACREAGE | FACILITIES |
|------------------------|------------------------|---------------|-----------------------|
| OPEN SPACE (continued) | | | |
| 7OS | Ramona Expressway | 12.0 | To be designed |
| 80S | Unnamed | 39.0 | To be designed |
| 90S | Unnamed | 28.0 | To be designed |
| TOTAL OPEN SPACE | | 1,121.0 | |
| GOLF COURSES | | | |
| 1GC | New Perris PA13 | 19.0 | Golf Course |
| 2GC | New Perris Golf Course | 152.0 | Golf Course |
| 3GC | Parkwest Golf Course | 45.0 | GolfCourse/Open Space |

Note: Undesignated future local parks on Figure COSR-4 equal approximately 169 acres.

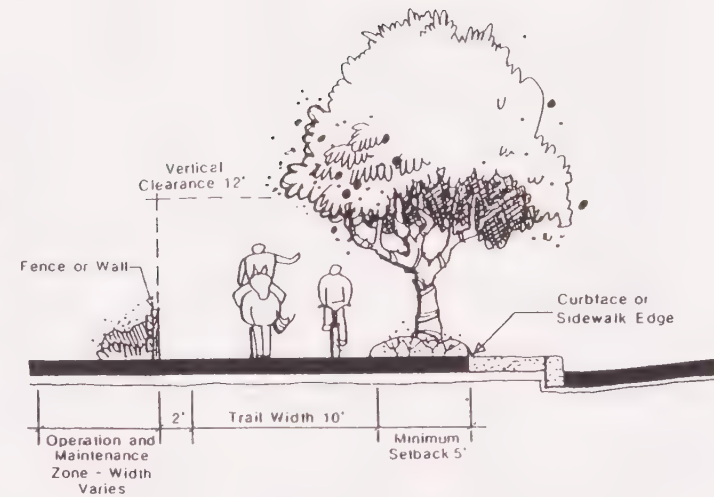
**TABLE COSR-4
PARKLAND STANDARDS**

| TYPE | SIZE | SERVICE AREA | LOCATION | USUAL FACILITIES AND REMARKS |
|------------------------|---------------------|-----------------------------------|--|--|
| Neighborhood Park | Up to 20 acres | Approximately 1/2 mile radius | Preferably adjoining an elementary school near the center of a neighborhood unit. | Play areas, multi-purpose courts, tennis courts, picnic areas, open turf area, on-site parking. |
| Community Park | 15 to 50 acres | Approximately 1 to 3 miles radius | At or near the intersection of major or secondary thoroughfares near center of service area. | Ball fields, court sports, and other active athletic areas, children's play area, on-site parking, restrooms and picnic areas. |
| Open Space Linkages | No size constraints | Varies | Along easements, flood-plains, steep slopes, greenbelts. | Pedestrian and bicycle paths, natural open space. Generally linear in shape. |
| Regional Park | No site constraints | Regional | Within 1 to 3 hours travel time from urban populated areas. | Hiking, camping and picnic facilities. |
| Joint-Use with Schools | 5 to 7 acres | Approximately 1/2 mile radius | Park space adjacent to or within a public school site. | Playground, grass, ball fields. |



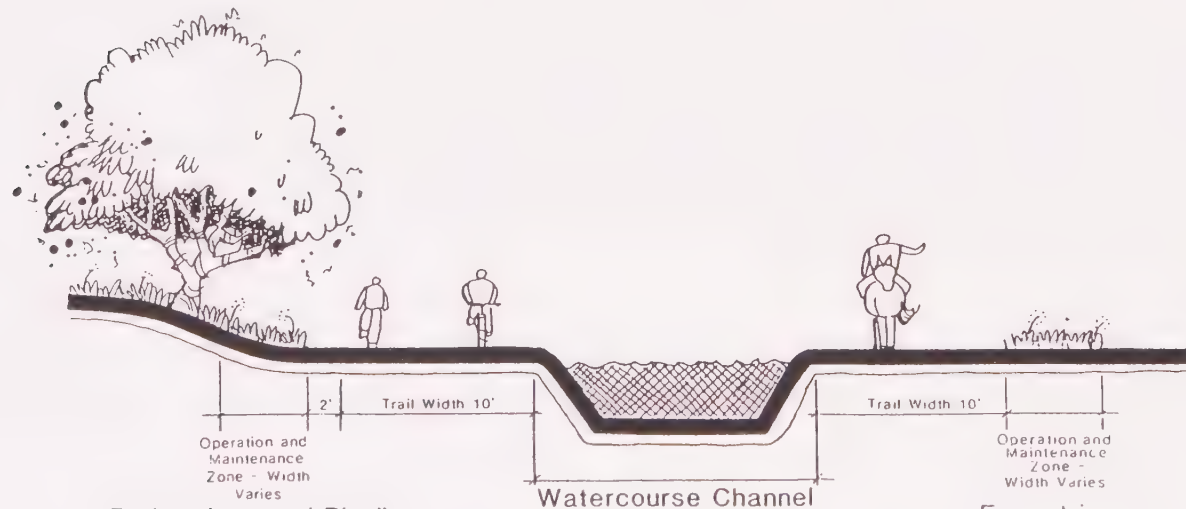


General Riding and Hiking Trail



Riding and Hiking Trail Next to Roadway

Note: Reduced trail widths may be necessary in some areas due to topographic constraints, available right-of-way or other limitation. Trail cross-sections are conceptual. Specific trail standards are described in the city's Master Park Plan.



Pedestrians and Bicyclists

Watercourse Channel

Equestrians

Trail Adjacent to Watercourse Channel



P · E · R · R · I · S

IMPLEMENTATION PROGRAM

California Code Section 65564 requires that every local open space plan contain an action program to implement the Plan's goals and policies. In addition, an implementation program provides a guide to the community, City staff and officials for implementing the adopted Conservation, Open Space and Recreation policies.

OPEN SPACE ACTION STRATEGIES

The City's Open Space/Recreation Plan requires the acquisition, enhancement, and maintenance of a parkland system that will serve the needs of the community. Several methods will be implemented by the City to maintain the expansion of the City's open space. These methods will be further defined in the City's Master Parks Plan and may include:

- Develop a City acquisition program to acquire lands appropriate for open space use;
- Require exactions or in-lieu fees through the Subdivision Map Act process (Government Code Section 66477);
- Acquire easement interests pursuant to the Open Space Easement Act of 1974 (Government Code Section 51070 et. seq.);
- Require open space provision through specific plans and development agreements;
- Jointly acquire environmentally sensitive lands through a joint powers agreement with other cities or the County;
- Use bonds or assessment districts to acquire open space lands; and
- Apply for open space funding grants available to local governments by the state, private foundations, community-minded citizens or non-profit land trusts.

IMPLEMENTATION MEASURES

Implementation measure for the Conservation/Open Space/Recreation Element are intended to preserve natural resources, manage the production of resources, maintain public health and safety, and provide for the recreational needs of the City's inhabitants.

Preservation and Managed Production of Natural Resources

Using the City's development review process, development proposals within natural resource areas identified in the Element will be assessed in terms of impacts to the following characteristics where they exist on or near the proposed development site:

- Riparian corridors
- Sensitive biological habitat
- Naturally steep slopes (over 30 percent grade)
- Ground and surface water resources
- Rock outcroppings
- State recognized mineral resource zones
- Prime agricultural soils

Responsible Agency: Planning Department

Funding Source: City/Development Applications

Time Frame: Ongoing

Related Policies: 1.1-1.5, 2.1-2.5, 3.1-3.4, 6.1-6.4, 8.1-8.6

Maintain Public Health and Safety

To protect sensitive lands in the City, the development review process will require hydrological studies to determine flooding risks associated with the development and mitigation measures to minimize flood hazard impacts.

Responsible Agency: Planning Department

Funding Source: City/Development exactions

Time Frame: 1991

Related Policies: 5.1-5.5

Recreational Needs

Land Use Plan: To meet the recreational needs of the City's inhabitants, the Land Use Element includes a Land Use Policy Map identifying the location of lands designated for Parks/Recreation/Natural Open Space and Public/Semi-Public/Utilities. These two land use designations will provide areas for both active and passive recreational needs within the City.

Funding Source: City

Time Frame: Ongoing

Related Policy: 8.2

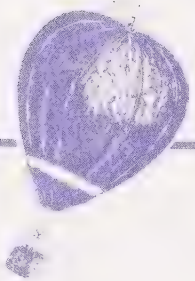
Master Parks Plan: A Master Plan of Parks will be prepared based on the classification system described in this Element to provide for the continued maintenance and improvement of existing parkland, trails, and open space, as well as the acquisition, improvement and maintenance of future parkland, trails, and open space. This plan will also ensure that City recreation and open space lands which are adjacent to parkland in the County are integrated with that parkland to provide greater opportunities for use.

Funding Source: City/Development exactions and in-lieu fees

Time Frame: Master Plan - 1982 / Acquisition, improvement and maintenance - Ongoing

Related Policies: 9.1-9.9

PERRIS



GENERAL PLAN

CITY OF PERRIS
Seismic Safety and
Public Safety General
Plan Elements

Prepared by
Envicom Corporation

Adopted November 1976

Revised by Planning
Department Staff
December 1981

RESOLUTION NO. 940

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PERRIS
ADOPTING A SEISMIC SAFETY ELEMENT AND A GENERAL SAFETY ELEMENT
TO THE GENERAL PLAN OF THE CITY OF PERRIS

WHEREAS, Sections 65302(f) and 65302.2 of the State of California Government Code require General Plans to contain a Seismic Safety Element; and

WHEREAS, Section 65302.1 of the State of California Government Code requires General Plans to contain a Safety Element; and

WHEREAS, the City of Perris entered into a joint powers agreement with the County of Riverside and the several cities for said element preparations; and

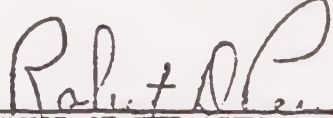
WHEREAS, pursuant to said agreement ENVICOM Corporation of Sherman Oaks, California was retained as geologic and general safety consultant to prepare said elements; and

WHEREAS, the Planning Commission of the City of Perris did receive said elements as prepared in combined form from ENVICOM, reviewed, corrected and revised same and did forward same to the City Council under formal resolution recommending adoption; and

WHEREAS, the City Council did conduct formal public hearing to solicit public participation; and

WHEREAS, the combined Seismic/Safety Element attached hereto as Exhibit A has been determined to satisfy all requirements of the law;

NOW BE IT RESOLVED, that the City Council of the City of Perris adopts said elements to the City of Perris General Plan this 29th day of November, 1976.



MAYOR OF THE CITY OF PERRIS

I certify that the foregoing is a true and correct copy of the Resolution which was duly adopted by the City Council of the City of Perris at a regular meeting thereof duly held on the 29th day of November, 1976.



CITY CLERK OF THE CITY OF PERRIS

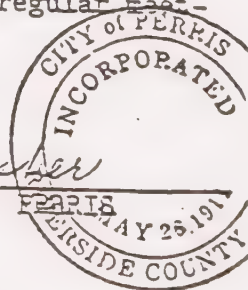


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| * City Staff Developed | |

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I. INTRODUCTION

A. Legislative Authority

The California State Legislature, through requirements of the Seismic Safety and Safety Elements, has placed specific responsibilities on local government for identification and evaluation of natural hazards and formation of programs and regulations to reduce risk. Specific authority is derived from Government Code Sections 65302(f) and 65302.1 which require Seismic Safety and Public Safety Elements of all city and county general plans as follows:

"A Seismic Safety Element consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to the effects of seismically induced waves such as tsunamis and seiches."

"The Seismic Safety Element shall also include an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure, and seismically induced waves." (Section 65302(f)).

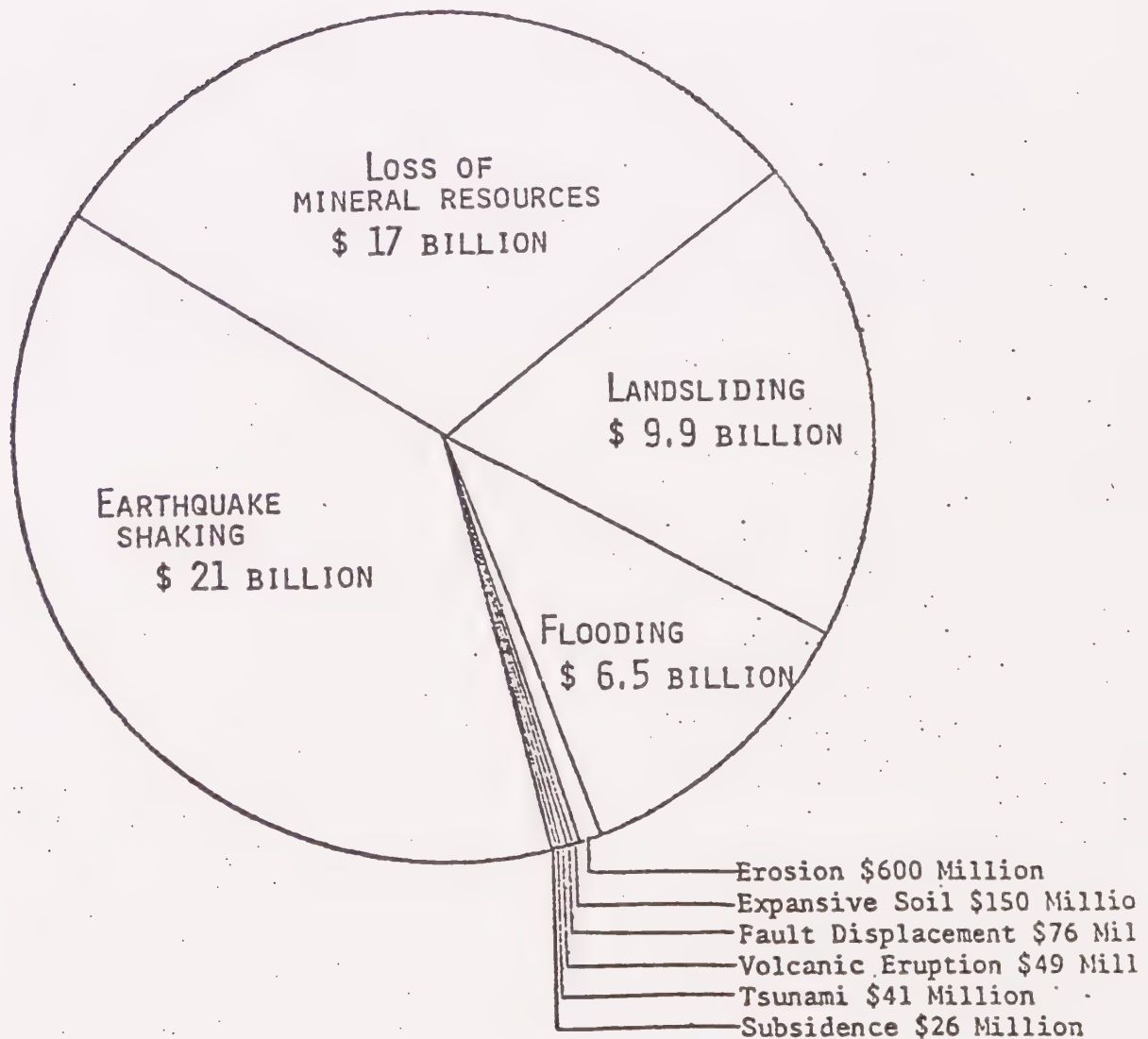
"A Safety Element for the protection of the community from fires and geologic hazards including features necessary from such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazards." (Section 65302.1)

The effect of these sections is to require cities and counties to take seismic and other natural hazards into account in their planning programs. The principal catalyst for these requirements was the February 9, 1971 San Fernando earthquake in which 65 people were killed and property damage exceeded the billion dollar mark. Conclusions from the 1973 Urban Geology Master Plan for California also give cause for considering geologic hazards in the planning process. Summary conclusions from this study estimate dollar losses due to geologic hazards in California between 1970 and 2000 will amount to more than \$55 billion.

B. Purpose And Approach

The basic objectives of the Seismic Safety and Safety Elements are to identify and evaluate natural hazards confronting cities and counties and to recommend policies that would reduce the adverse impact of those hazards if they are realized. Specifically, these elements evaluate both primary and secondary seismic hazards, flooding, and fire. The intent of the recommended policies is to provide an opportunity to reduce the loss of life, property damage, and social and economic dislocations in the event of a major earthquake, flood, or fire.

GEOLOGIC HAZARDS IN CALIFORNIA
TO THE YEAR 2000:
A \$55 BILLION PROBLEM



Source: Urban Geology, Master Plan for California, Bulletin 198, 1973.

The purpose of this document is to serve as an official guide to the City Council, the Planning Commission and other governmental bodies, citizens, and private organizations concerned with natural hazards in the City of Perris. The Seismic Safety and Safety Elements are intended to establish uniformity of policy and direction within the City government to minimize the risk from seismic events and other natural hazards. These Elements include goals, policies, safety criteria, and maps as a basis for decision making in public and private development matters. Such information should be used in conjunction with other established City policies contained in the General Plan, and should play a role in determining future land use.

The Seismic Safety and Safety Elements have been prepared as two reports for the City of Perris. The first is the County of Riverside Technical Report which contains a detailed presentation of the methods and findings regarding seismic, flood, and inundation hazards for the County as a whole. The second is this document which contains both a technical analysis of hazards at the local level (city-wide) as a supplement to the County report, and a recommended set of policies for hazard reduction. It should be noted that the sciences of seismology and fire ecology are relatively young and that much remains to be learned. The basic philosophy under which this document was prepared is that we should incorporate natural hazards analysis into the planning process based on what we know today, rather than waiting until we know all that we would like to know. .

II. EXISTING CONDITIONS

A. Types Of Hazards

Three basic groups of natural hazards are considered in this document: seismic, flooding, and fire hazards. There are several types of seismic hazards which can be grouped in a cause-and-effect classification that is the basis for the order of their consideration. Earthquakes originate as shock waves generated by movement along an active fault. The primary seismic hazards are ground shaking and the potential for ground rupture along the surface trace of the fault. Secondary seismic hazards result from the interaction of ground shaking with existing soil and bedrock conditions, and include liquefaction, settlement, landslides, tsunamis or "tidal waves", and seiches (oscillating waves in lakes and reservoirs).

The potentially-damaging natural events (hazards) discussed above may interact with man-made structures. If a structure is unable to accommodate the natural event, failure will occur. The potential for such failure is termed a structural hazard, and includes not only structures themselves, but also the potential for damage or injury that could occur as the result of movement of loose or inadequately restrained objects within, on, or adjacent to a structure.

A more in-depth discussion of earthquake terminology and concepts is included in the Introduction of the Seismic Safety Element Technical Report, along with a Glossary of Terms in the back of the Report.

Flooding hazards in this report are considered in two categories: natural flooding and dam inundation. Natural flooding hazards are those associated with major atmospheric events that result in the inundation of developed areas due to overflows of nearby stream courses or inadequacies in local storm drain facilities.

Dam inundation hazards are those associated with the downstream inundation that would occur given a major structural failure in a nearby water impoundment.

B. Technical Analyses

1. Seismic Hazards

Geologic and Seismic Setting

The geologic setting of the Perris area can be simplified into two basic units. The hills to the west of the City are underlain by relatively hard granitic rocks ("A" on Plate I), while the valley at and to the east of the City is underlain by Pleistocene alluvium. The latter increases in thickness from zone 0-200 feet thick ("D" on Plate I) along the edge of the hills to thicknesses up to about 1000 feet to the east ("B" on Plate I).

The seismic setting can be characterized as one of relatively low hazard in comparison to areas to the east and north because of the greater distance from the San Jacinto fault zone. The main part of the City is in

Zone II while the valley to the northeast is in Zone III.

Active and Potentially Active Faults

No active or potentially active faults are known to be present in the Perris area. A suspected fault located about one-half mile east of Highway 395 has recently been proposed by Moyle (1974) on the basis of a groundwater barrier. There is no specific data to indicate that this fault is active, and no specific governmental response is recommended at this time. However, the County Geologist should be alert to any new data from this area that may help resolve this problem.

Earthquake Shaking

Earthquake shaking is expected to be moderately strong as a result of earthquakes generated by movement of faults within the San Jacinto fault zone. The zonation for earthquake shaking is discussed in the County technical report, and the boundaries of the zones are shown on Plate I. The general characteristics of the earthquakes are given in Table 1, and applicable response spectra are included in Figures 1 through 6.

Secondary Hazards

Groundwater levels are generally at substantially greater depth than the 30 feet normally considered conducive to liquefaction. Settlement, however, may be a problem in some parts of the area in that the surficial sediments are somewhat similar to those near Hemet and San Jacinto where significant differential settlement has been reported. While no specific problem areas have been identified within the Perris area, soils engineers should be alert to this potential problem in conducting foundation investigations in the "B" or "D" zones.

Landslides and slope instability are a relatively minor hazard. The steeper slopes are underlain by granitic rocks, and the downslope movement of loose rock or boulders during strong ground shaking is the most likely slope hazard in the area. However, the potential for instability exists in all the hillside areas, and engineering geologic investigations are recommended for developments in these areas.

Seiching

Seiching is not a significant hazard in the planning area except as they may affect water storage tanks on hillside locations above inhabited structures. No specific tanks have been identified as being a hazard, but tanks constructed in the future should be designed to take into account the levels of expected shaking at the applicable frequencies as defined by the spectra included.

Conclusions and Recommendations

- ° No "active" faults are known to be present in the Perris area, but a possible fault, located about one-half mile east of Highway 395, is suggested by groundwater anomalies noted in recent work by the U.S. Geological Survey. On this basis, the fault could be considered "potentially active," but in the absence of more direct

TABLE 1
GENERALIZED CHARACTERISTICS OF EXPECTED EARTHQUAKES
PERRIS, CALIFORNIA

| Zone | g | T | t | S |
|----------------|------|---------|-------|----------|
| Use Category B | | | | |
| II A | 0.33 | 0.1-0.2 | 10-15 | 1 x 1.25 |
| II B | 0.45 | 0.1-0.3 | 15-25 | 2 x 1.25 |
| II D | 0.55 | 0.1-0.3 | 15-25 | 3 x 1.25 |
| III A | 0.54 | 0.1-0.2 | 15-20 | 4 x 1.25 |
| III B | 0.72 | 0.1-0.3 | 20-30 | 5 x 1.25 |
| III D | 0.90 | 0.1-0.3 | 20-30 | 6 x 1.25 |
| Use Category C | | | | |
| II A | 0.27 | 0.1-0.2 | 8-12 | 1 |
| II B | 0.36 | 0.1-0.3 | 10-20 | 2 |
| II D | 0.44 | 0.1-0.3 | 10-20 | 3 |
| III A | 0.43 | 0.1-0.2 | 10-15 | 4 |
| III B | 0.58 | 0.1-0.3 | 15-25 | 5 |
| III D | 0.72 | 0.1-0.3 | 15-25 | 6 |
| Use Category D | | | | |
| II A | 0.19 | 0.1-0.2 | 5-10 | 1 x 0.7 |
| II B | 0.26 | 0.1-0.3 | 8-15 | 2 x 0.7 |
| II D | 0.31 | 0.1-0.3 | 8-15 | 3 x 0.7 |
| III A | 0.27 | 0.1-0.2 | 8-12 | 4 x 0.64 |
| III B | 0.37 | 0.1-0.3 | 10-20 | 5 x 0.64 |
| III D | 0.46 | 0.1-0.3 | 10-20 | 6 x 0.64 |

g = Maximum ground acceleration expressed as a decimal fraction of the acceleration of gravity
T = Predominant period of ground shaking in seconds
t = Duration of "strong" shaking in seconds
S = Figure number for applicable response spectra and amplification factor for spectral values

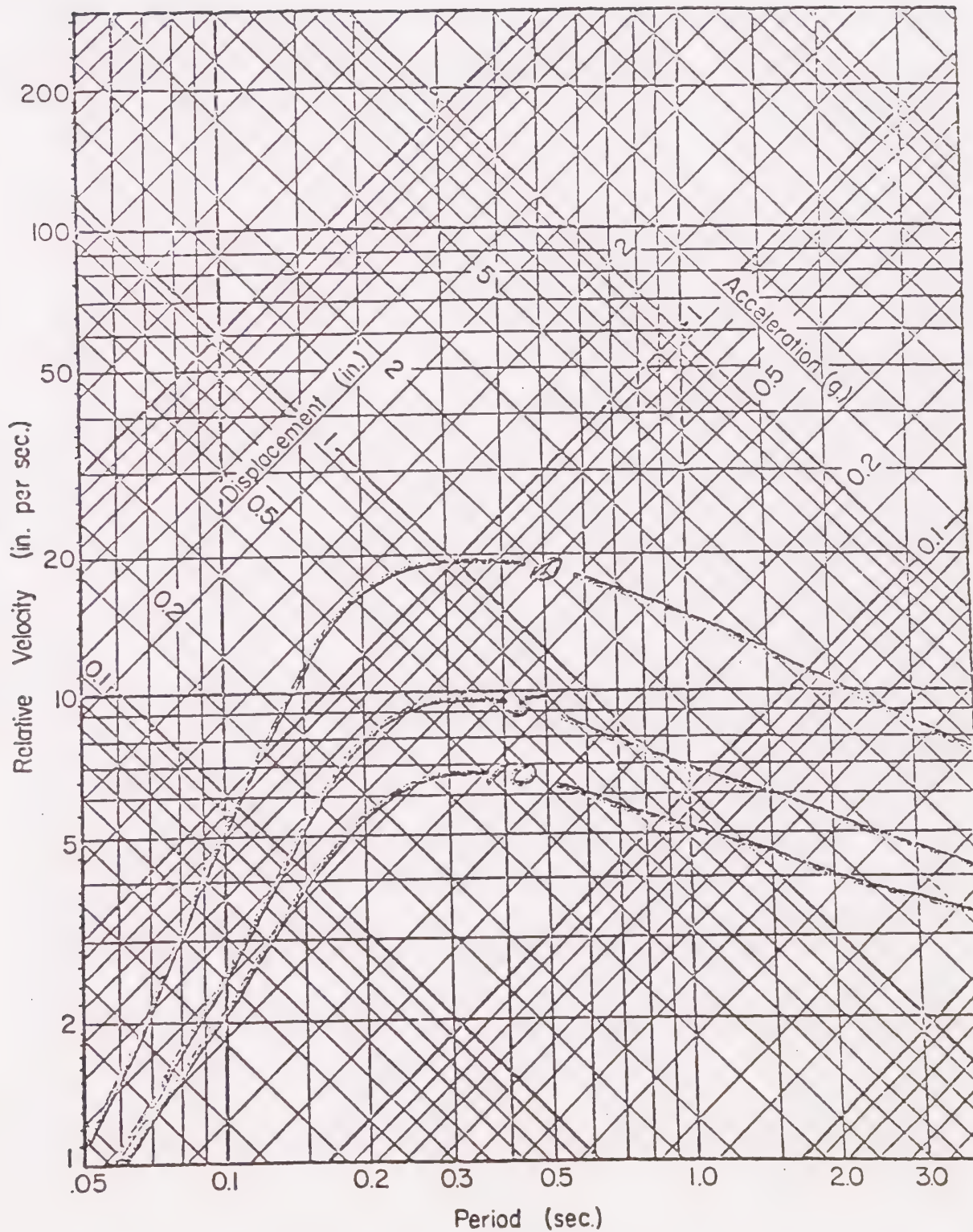


Figure 1. Response spectrum from Zone IIA. Curves are for 0, 5, and 10% critical damping.

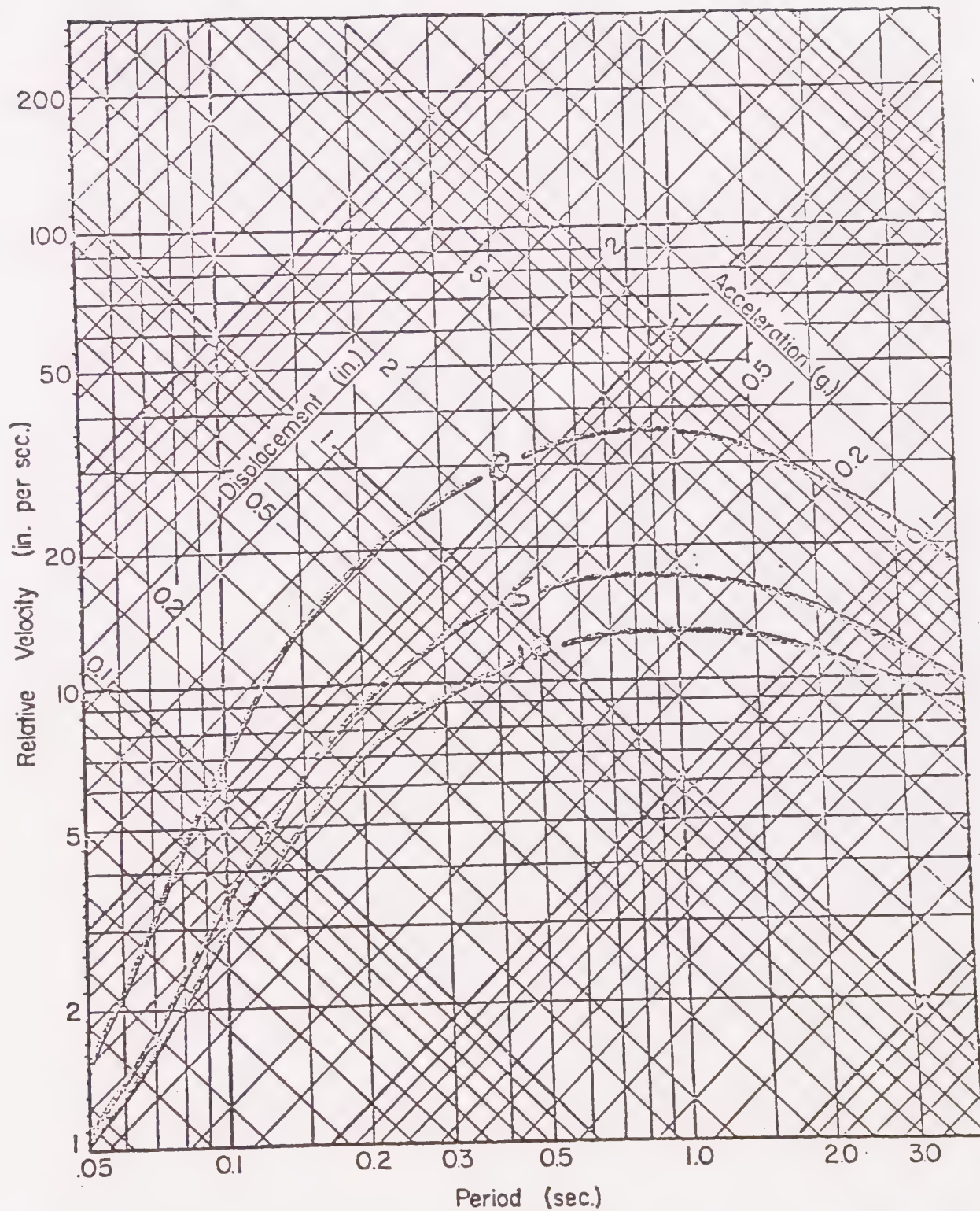


Figure 2. Response spectrum from Zone IIB. Curves are 0, 5, and 10% critical damping.

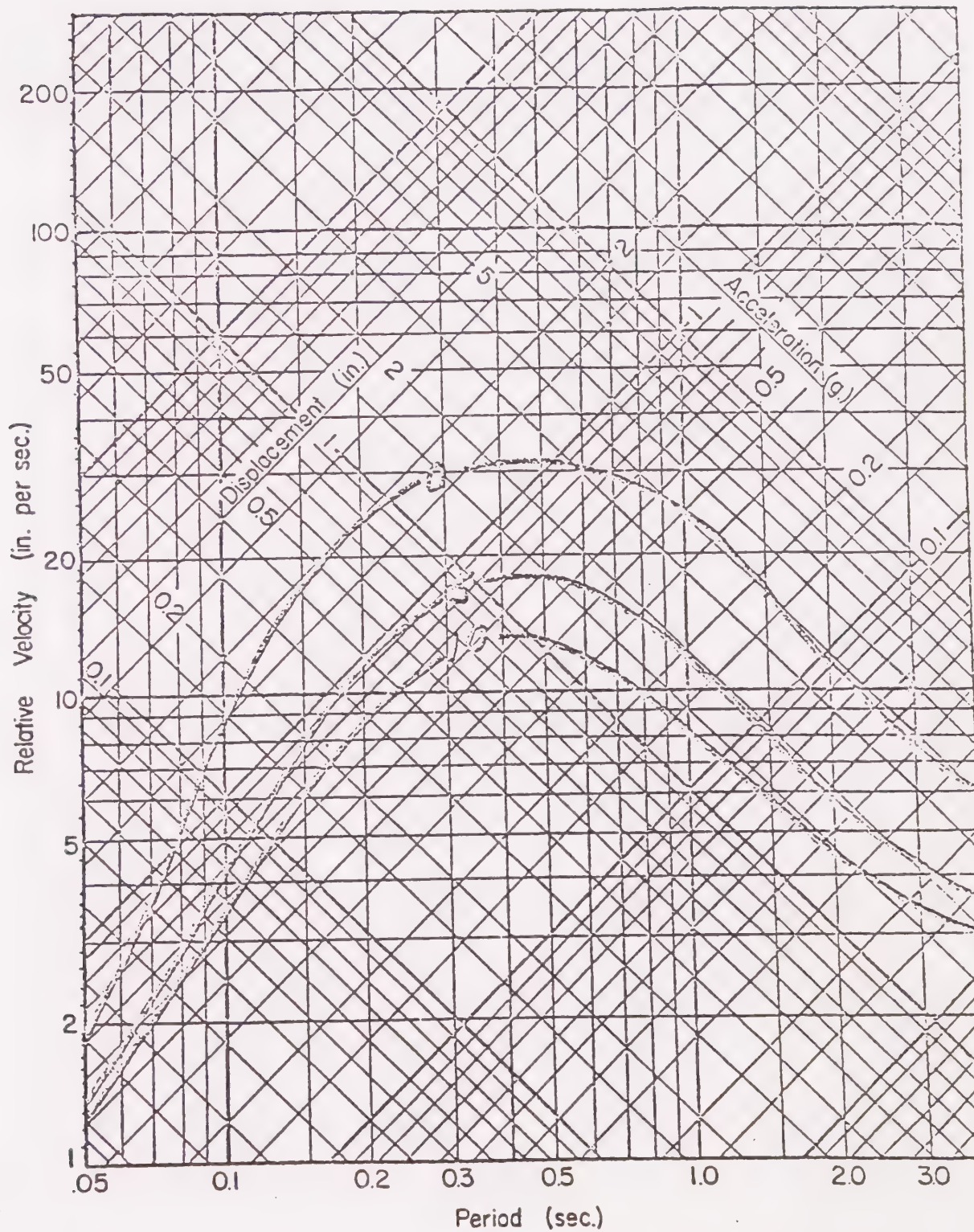


Figure 3. Response spectrum from Zone IID. Curves are for 0, 5, and 10% critical damping.

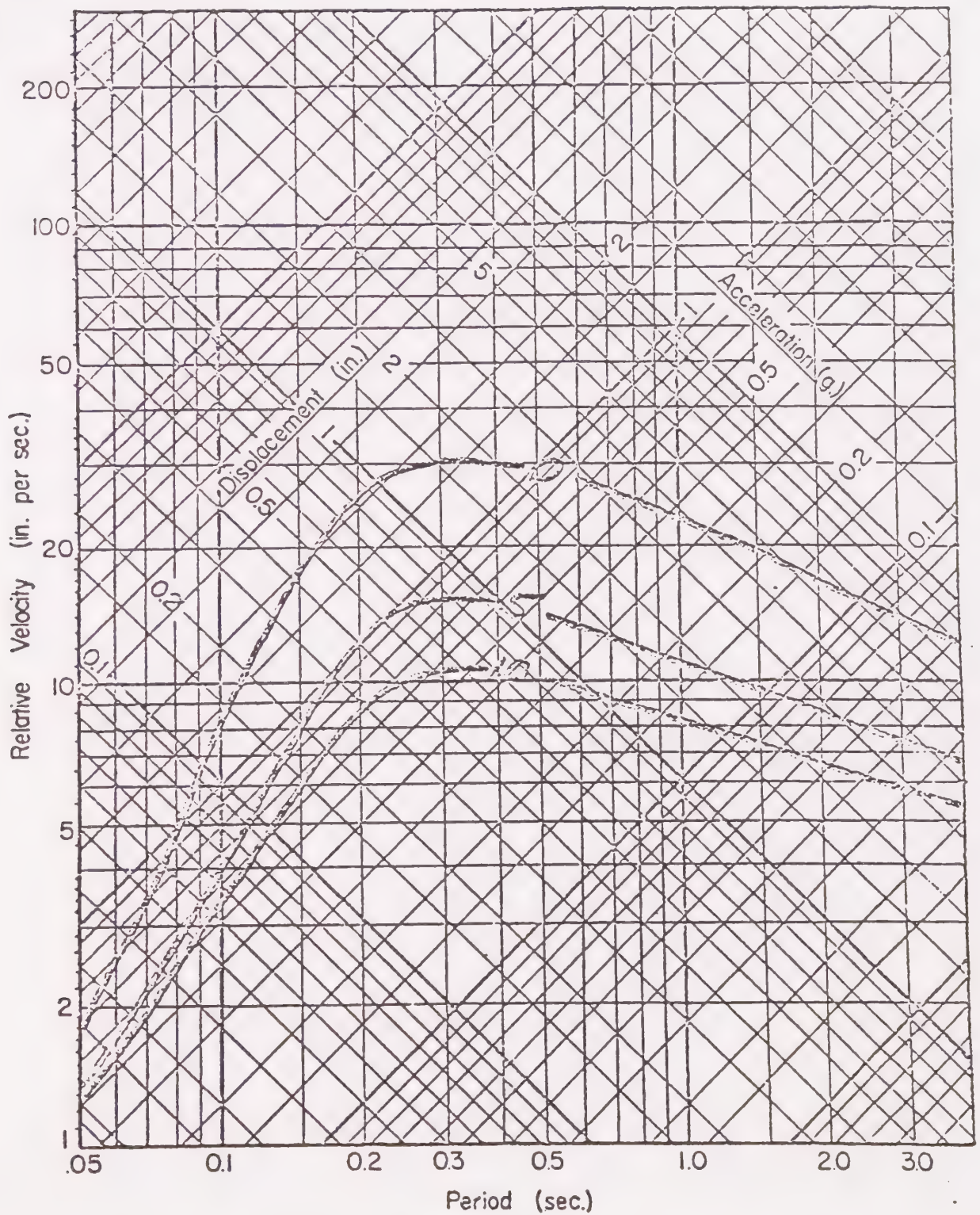


Figure 4. Response spectrum from Zone IIIA. Curves are for 0, 5, and 10% critical damping.

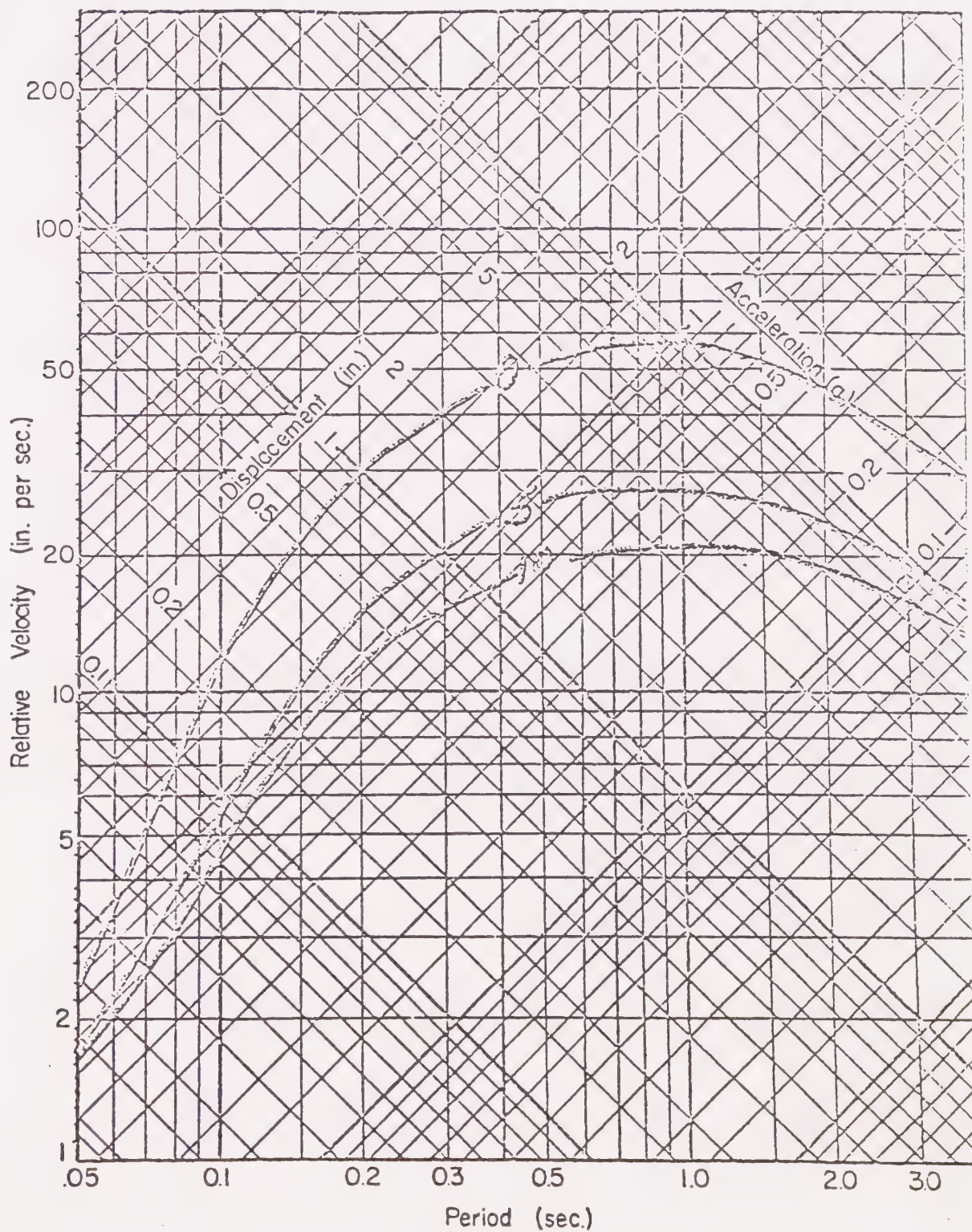


Figure 5. Response spectrum from Zone IIIB. Curves are for 0, 5, and 10% critical damping.

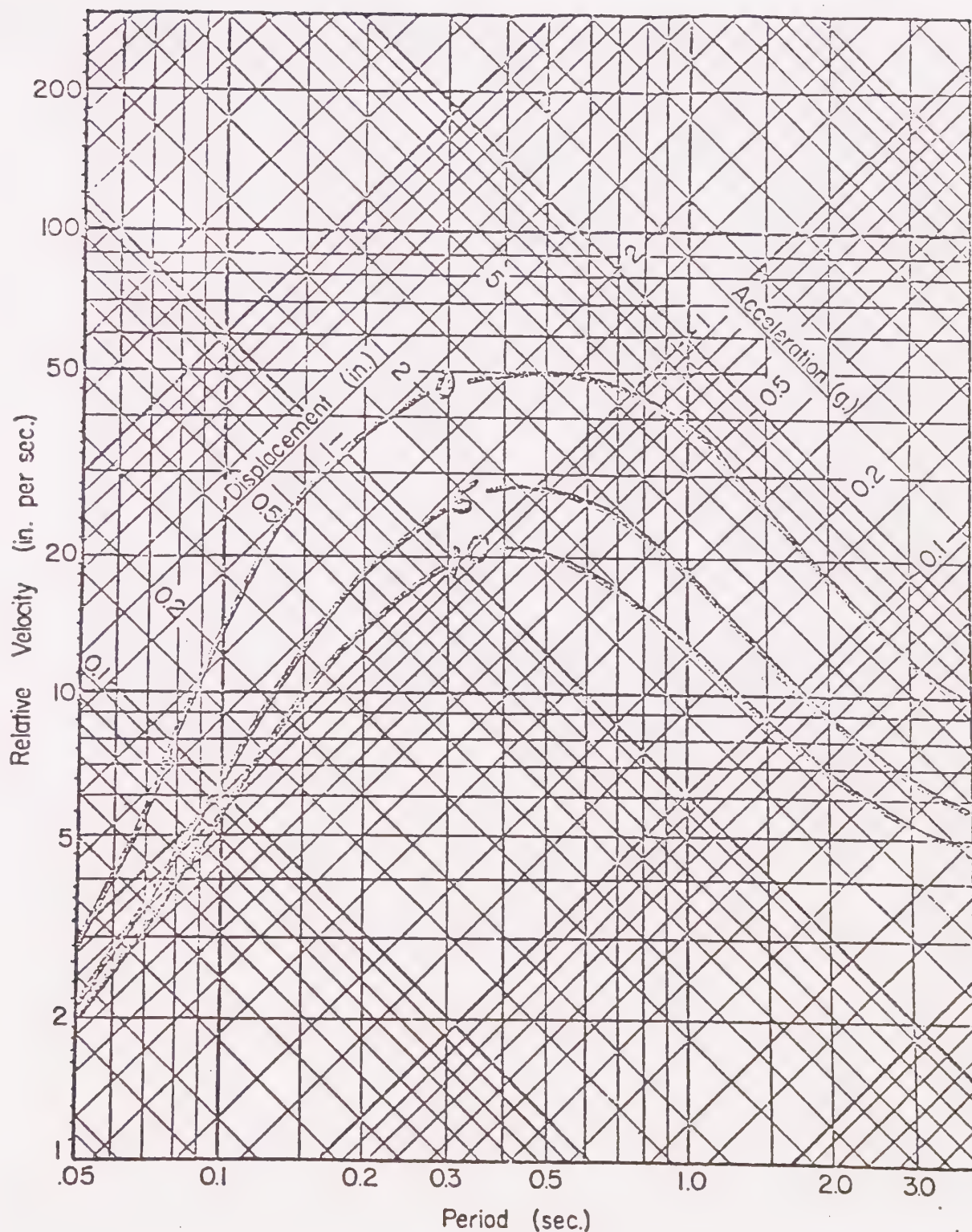


Figure 6. Response spectrum from Zone IIID. Curves are for 0, 5, and 10% critical damping.

evidence no governmental response is recommended at this time. However, the County Geologist should be alert to any new data that may help resolve this problem.

- ° Earthquake shaking is expected to be moderately strong as the result of movement on the nearby San Jacinto fault zone. The areal distribution of the zonation for ground shaking is shown on Plate I, and the general characteristics of the expected shaking are given in Table 1. Applicable response spectra are referenced in the Table and included as Figures 1 through 6.
- ° Liquefaction is not a problem in the planning area because groundwater is generally below 100 feet. Settlement, however, may be a problem in that surficial sediments are similar to those in the San Jacinto Valley to the southeast where significant settlement has been reported. No specific problem areas have been identified, but soils engineers should be alert to this potential problem in conducting foundation investigations in the area.
- ° Slope instability problems are moderate in relation to the County generally, and low in relation to many areas of California. However, the potential for instability exists in all hillside areas, and engineering geologic investigations are recommended for developments in these areas.
- ° Seiching may present a hazardous situation in water storage tanks on hillside locations above developed areas. No specific tanks have been identified as being hazardous, but tanks constructed in the future should be designed for the expected ground shaking as defined herein.

2. Flooding Hazards

Hydrologic Setting

The City of Perris is located in the broad, and very-flat Perris Valley in western Riverside County. Mean elevation is approximately 1486 feet and average seasonal rainfall is approximately 11.56 inches (Troxell, 1948). Most rainfall occurs during the months of winter and early spring, as is characteristic of Mediterranean climates.

The Perris Valley has never developed a well-defined natural watercourse. This is because of high rates of percolation in valley bottoms and the flat, shallow gradients of local topography. However, during periods of heavy rainfall, local watersheds demonstrate the lack of drainage potential in the Perris Valley.

To help facilitate better drainage during periods of high runoff, the Perris Valley Storm Drain was constructed by the Riverside County Flood Control and Water Conservation District (RCFCWCD). The channel traverses the valley in a southerly direction and receives flood runoff from the Sunnymead Channel System, Moreno Valley, and the March Field area. The channel then empties into the San Jacinto River near Highway 395.

The Perris Valley Storm Drain conveys considerable amounts of water during periods of high runoff, and at certain times, it has actually surpassed the San Jacinto River in terms of peak flow, as demonstrated in the following table.

Table 2
PEAK FLOWS & VOLUMES AT DISTRICT
OPERATED STREAM GAGING STATIONS FOR
VARIOUS STORM PERIODS

| <u>Storm Period</u> | <u>San Jacinto River</u> | | <u>Perris Valley Channel</u> | |
|---------------------|---------------------------|------------------------------|------------------------------|------------------------------|
| | <u>Peak Flow cfs.</u> | <u>Total Vol. (A.F.)</u> | <u>Peak Flow cfs.</u> | <u>Total Vol. (A.F.)</u> |
| 1/152 - 2/20/52 | 1,570 | 7,070 | N.R. | N.R. |
| 3/7/58 - 4/16/58 | 478 | 7,987 | 224 | 649 |
| 11/22/65 - 12/4/65 | 460 | 1,795 | 1,760 | 1,777 |
| 12/3/66 - 12/21/66 | 369 | 1,733 | 567 | 1,206 |
| 1/19/69 - 2/17/69 | 1,570 | 6,501 | 3,590 | 3,508 |
| 2/18/69 - 5/21/69 | 5,334 | 50,039 | 6,250 | 12,526 |

NOTE:

"San Jacinto River" measured at Railroad Canyon Weir. Period of record = 1951 to 1969

"Perris Valley Channel" measured at Nuevo Road Bridge. Period of record = 1956 to 1969

Taken from "Report on 1969 Storms in Riverside County", Riverside County Flood Control and Water Conservation District.

Hazards Potential for Flooding

Flooding (Plate II)

Taken from: 1) RCFCWCD 1974 Flood Hazard Areas
2) Corps of Engineers (1970) Flood Plain Information
Corps of Engineers

Historically the City of Perris has experienced significant flooding during heavy storm activity periods, along virtually the entire length of the Perris Valley Storm Channel. Studies by both the U.S. Corps of Engineers and Riverside County indicate the flood plain associated with channel overflow will extend to the west of the present channel an average of 2000 feet from where the channel enters the study area to San Jacinto Boulevard.

South of San Jacinto Boulevard the floodplain associated with the Perris Valley becomes more extensive as the channel nears its confluence with the San Jacinto River. Backwaters from the San Jacinto River are caused by the river's restricted passage through Railroad Canyon, and contribute to the flooding potential in the Perris area.

Although the 100-year flood plain does not effect the downtown Perris area, substantial damage to outlying residential and agricultural areas northeast of the City could occur. It is expected that a 100-year flood will interrupt traffic flow along several of the local routes, including U. S. 395 and the Atchison, Topeka and Santa Fe rail line.

Improvements are proposed that will more efficiently control flood flows along the San Jacinto River; however, no similar measures have been proposed to increase the capacity of the Perris Valley Channel. As a result, flooding in the foreseeable future will be partially mitigated toward the south end of the valley only. Potential flooding conditions north of San Jacinto Avenue will remain.

Hazards Potential for Dam Inundation

The Perris area lies within the potential inundation plain of three reservoirs: Lake Hemet Dam, Pigeon Pass Reservoir, and the Lake Perris Dam. Each of these reservoirs pose significant inundation hazards: Lake Hemet Dam because of its 14,000 acre foot capacity, and Pigeon Pass Reservoir because of its location and proximity to the north of the City. The Lake Perris Reservoir lies approximately $4 \frac{1}{2}$ miles northeast of the central urbanized portion of Perris, and a substantial portion of the area within the City limits would be subject to inundation on short notice should a catastrophic failure of this facility occur.

Lake Hemet Dam

Lake Hemet Dam is an earth-fill facility located upstream of the Perris area on the San Jacinto River. A complete failure of the dam at full capacity would cause major flooding throughout the San Jacinto River Valley. Especially hard-hit would be areas adjacent to the City of San Jacinto where flooding greater than the Corps of Engineers "standard project flood" would occur.

The initial flood wave from Lake Hemet would require approximately $7 \frac{1}{2}$ hours to reach the Perris area. Resulting inundation would be largely restricted to an area south of Metz Road, and would approximate in severity the 100-year flood. The amount of time required for the flood wave to reach the City area would mitigate much of the hazard to public safety; however, extensive property damage in the inundated areas would still be anticipated.

Pigeon Pass Reservoir

Pigeon Pass Reservoir contains at full capacity approximately 912 acre feet of water, and is impounded by an earth-fill dam. It is located north of the Perris area, at the mouth of Pigeon Pass Canyon and serves as a flood-control facility for that watershed. As such, the reservoir is usually without water.

A failure of Pigeon Pass Dam at full capacity would inundate an area approximately $\frac{1}{2}$ - 1 mile wide, roughly paralleling the Perris Valley Storm Drain. The initial flood wave would reach the City in approximately 225 minutes, and traverse the area in an additional 450 minutes. The entire flooding episode would be brief, and would be generally less extensive than a 100-year flood along the Perris Valley Storm Drain.

Lake Perris Reservoir

As the southernmost terminus of the California State Water Project, Lake Perris is an important water storage facility for Southern California. The lake also serves as a major recreational attraction for this region of the state as it is developed as a State Park providing boating, camping, hiking and other facilities. Lake Perris covers a total area of 2,240 acres and has a maximum capacity of 120,000 acre feet of water. The dam itself, which is of rock and earth fill construction, is 126 feet high and is more than two miles long. While this structure is designed to withstand the effects of the maximum probable earthquake expected to occur within the area, a partial or total failure of this dam would inundate large areas of the City and its environs in a very short time period. In the event of total failure, the intersection of Perris Boulevard and Nuevo Road would be inundated within 20 minutes, according to the maps published by the State Department of Water Resources. Most of the area south of Oleander Avenue and east of Highway 15-E north of this point would be covered with water, as would the area east of Perris Boulevard along the urbanized portion of the City. Waters would backflow north along the San Jacinto River flood-plain, and the inundation could continue southwest as far as Railroad Canyon and along Ethanac Road in the direction of Romoland and Sun City. It is important to note that although such an event is very unlikely, all of the evacuation routes to the north, east and southeast of the City could become impassible should such a catastrophic dam failure occur.

While dam failures and subsequent inundations are events that are considered very unlikely to occur, the nature of this hazard and its possible widespread catastrophic effects should be considered in the City's safety and disaster response planning. The inundation maps for Perris Dam, which are available for review in the Planning Department and the Riverside County Office of Disaster Preparedness, should be incorporated by reference into this Safety Element as well as the Comprehensive Perris General Plan. Plate VII B (Safety Element Map), which is included in this Element, shows the inundation areas for both Lake Hemet Dam and Pigeon Pass Reservoir, as well as the generalized areas subject to 100 year interval flooding.

Dam failures and subsequent inundations should be considered as events that can occur, but are very unlikely to occur. However, the nature of the hazard is such that it should be considered.

Conclusions

- The City of Perris and environs are exposed to substantial 100-year flooding risks, originating along the Perris Valley Storm Drain and the San Jacinto River. Flooding at the 100-year level will not impact the urbanized portions of downtown Perris, although damages can be expected to occur in areas along the Perris Valley Channel. Local transportation will be interrupted as would Route 15-E, the major traffic link in the areas.
- The area would be impacted in the event of a failure of Lake Perris Dam, Lake Hemet Dam or Pigeon Pass Dam. While the areas subject to inundation after failure of either the Lake Hemet or Pigeon Pass Dam would generally follow the 100 year flood plain areas along the Perris Valley Storm Channel and San Jacinto River, a failure of

Lake Perris Dam would affect a significantly larger area of the City and the surrounding areas of Perris Valley. A failure of the Hemet Dam would have a greater effect upon the region than would a similar event involving the Pigeon Pass Dam; however, because of its proximity, Pigeon Pass Dam presents a more substantial potential hazard to the Perris Valley Area.

- o In view of the nature of these dam failure and resultant inundation hazards, the City should develop an adequate emergency evacuation plan as part of its overall disaster response planning. This evacuation plan should be integrated with the City of Perris Emergency Operations Plan as it is periodically updated and revised, and it should satisfy the applicable requirements of State Law. (Government Code Section 8589.5)

3. Fire Hazards

General Information

The City of Perris Fire Department was formed in 1911 as a process of incorporation. The department is a volunteer force under the direction of one full-time paid Fire Chief along with a staff of one Fire Prevention Officer and one Clerk/Dispatcher - who are also full-time and paid by the city. The department has provided continuous service since its founding and was the first in western Riverside County to provide a resuscitation service as a portion of its rescue operations.

The city maintains two mutual aid agreements for fire service. One is the State of California Mutual Fire Aid Agreement, and the other is with the State Department of Forestry/Riverside County Fire Department. Under terms of the agreements, the city department can request additional support of either men or equipment.

Presently, the department has three (3) fire and rescue vehicles which cover the city service area:

- 1) a Van Pelt 1000 GPM pumper
- 2) a Crown 1000 GPM pumper
- 3) a GMC rescue-equipped van

Being considered for purchase to replace the GMC rescue-equipped van is a quick-attack vehicle which has a combination of emergency rescue and firefighting capabilities. This replacement will considerably lessen the operational cost on incidents where both rescuing and firefighting may be necessary - i.e., vehicle traffic collisions and/or vehicle fires.

Communications equipment consists of the following:

- A. Three (3) Motorola Mocom-70 Transceivers on the fire vehicles.
 1. Operating Frequencies
 - a. 153.770 MHZ, Perris City Fire Net
 - b. 154.145 MHZ, County Fire Net 1
 - c. 154.230 MHZ, State Fire Net 1
- B. One (1) 100-Watt Base Station
 1. Consoles - 24-hour coverage
 - a. Fire Department Dispatch
 - b. Police Department Dispatch

The Volunteers possess ten (10) alert monitors for fire notification and have these issued to key members for home use. The Fire Chief utilizes a Handy-Talkie for control communications at fires.

All department members undergo rigid training ranging from the procedural handling of structural, brush and wildland fires to the proper use and maintenance of equipment and are certified. Ongoing training in first aid for injury and CPR is also provided and certification required. A level of state certification of Fire Fighter I is the department goal for all volunteers.

The department maintains a close coordination with the Police, Public Works, and Building & Safety Departments on a daily basis. Constant energies are being expended by Fire, Planning, and Public Works Department personnel to upgrade fire flow capabilities and protection criteria in new and rehabilitable structures.

The present location of the department, within the Civic Center, sufficiently meets response criteria to the urbanized area. However, the long term growth and urbanization reflected in the general plan indicates the present departmental system and location may become unsatisfactory. More men, equipment, and other station locations will be necessary should growth projections prove accurate. A comprehensive plan for the future development of the department and its needs is being considered.

Fire Hazard Discussion

The fire service area of the city is in transition from predominantly rural to urban in nature. The city presently covers 13.5 square miles of which approximately 3 square miles is urbanized and of which 70% of the urbanized area is centralized. This is graphically portrayed by the city map shown in Figure 8.

As would be expected by such service area statistics, the main fire threat and most responses involve brush/wildland fires. However, the percentages of fire experiences as reported by the department indicates a consistent shift in fire types from vegetation to urban-related types.

As shown on tables F1, F2 and F3, a progressive trend to increased structural fire incidents is indicated. Industrial, commercial, and residential structures will soon become the primary fire hazards in the developed core area of the city.

The map shown in Figure 9 shows the fire zones assigned to the city plus the Public Works Department water lines. Under Council approval an upgrading program of fire flow service lines under the Public Works Department direction and placement of additional hydrants has been instituted.

FIRE EXPERIENCE TABLE I
FROM 1975 STATISTICS

| <u>TYPE</u> | | <u>PERCENTAGE</u> |
|----------------------------|------------------------------|-------------------|
| 1. Unknown | | 0% |
| 2. Buildings | | 16.5% |
| | a. Institution | 1.3% |
| | b. 1-2 Family Residence | 7.5% |
| | c. Multiple Family Residence | 1.3% |
| | d. Storage Building | 1.4% |
| | e. Special Structure | 3.7% |
| | f. Unoccupied - Construction | 1.3% |
| 3. Grass | | 63.2% |
| 4. Vehicle | | 5.0% |
| 5. Refuse | | 11.4% |
| 6. Outside Structure | | 1.3% |
| 7. Explosion | | 0% |
| 8. Mobile Home | | 0% |
| 9. Other | | 2.5% |
| TOTAL | | 100.0% |

FIRE EXPERIENCE TABLE II
JANUARY 1, 1980 - DECEMBER 31, 1980

| <u>TYPE</u> | | <u>PERCENTAGE</u> |
|------------------------------|-------|-------------------|
| 1. Unknown | ..... | 1.7% |
| 2. Buildings | ..... | 20.5% |
| a. Institution | 4.7% | |
| b. 1-2 Family Residence | 8.1% | |
| c. Multiple Family Residence | 1.3% | |
| d. Storage Building | 1.3% | |
| e. Special Structure | 5.1% | |
| f. Unoccupied - Construction | 0% | |
| 3. Grass | ..... | 47.4% |
| 4. Vehicle | ..... | 13.7% |
| 5. Refuse | ..... | 5.1% |
| 6. Outside Structure | ..... | 2.6% |
| 7. Explosion | ..... | 1.3% |
| 8. Mobile Home | ..... | 3.0% |
| 9. Other | ..... | 4.7% |
| TOTAL | ..... | 100.0% |

FIRE EXPERIENCE TABLE III
JANUARY 1, 1981 - NOVEMBER 18, 1981

| <u>TYPE</u> | | <u>PERCENTAGE</u> |
|----------------------------|------------------------------|-------------------|
| 1. Unknown | | .9% |
| 2. Buildings | | 29.6% |
| | a. Institution | 5.1% |
| | b. 1-2 Family Residence | 7.3% |
| | c. Multiple Family Residence | 1.8% |
| | d. Storage Building | 1.3% |
| | e. Special Structure | 14.1% |
| | f. Unoccupied - Construction | 0% |
| 3. Grass | | 36.4% |
| 4. Vehicle | | 10.7% |
| 5. Refuse | | 9.9% |
| 6. Outside Structure | | .4% |
| 7. Explosion | | .9% |
| 8. Mobile Home | | 5.6% |
| 9. Other | | 5.6% |
| TOTAL | | 100.0% |

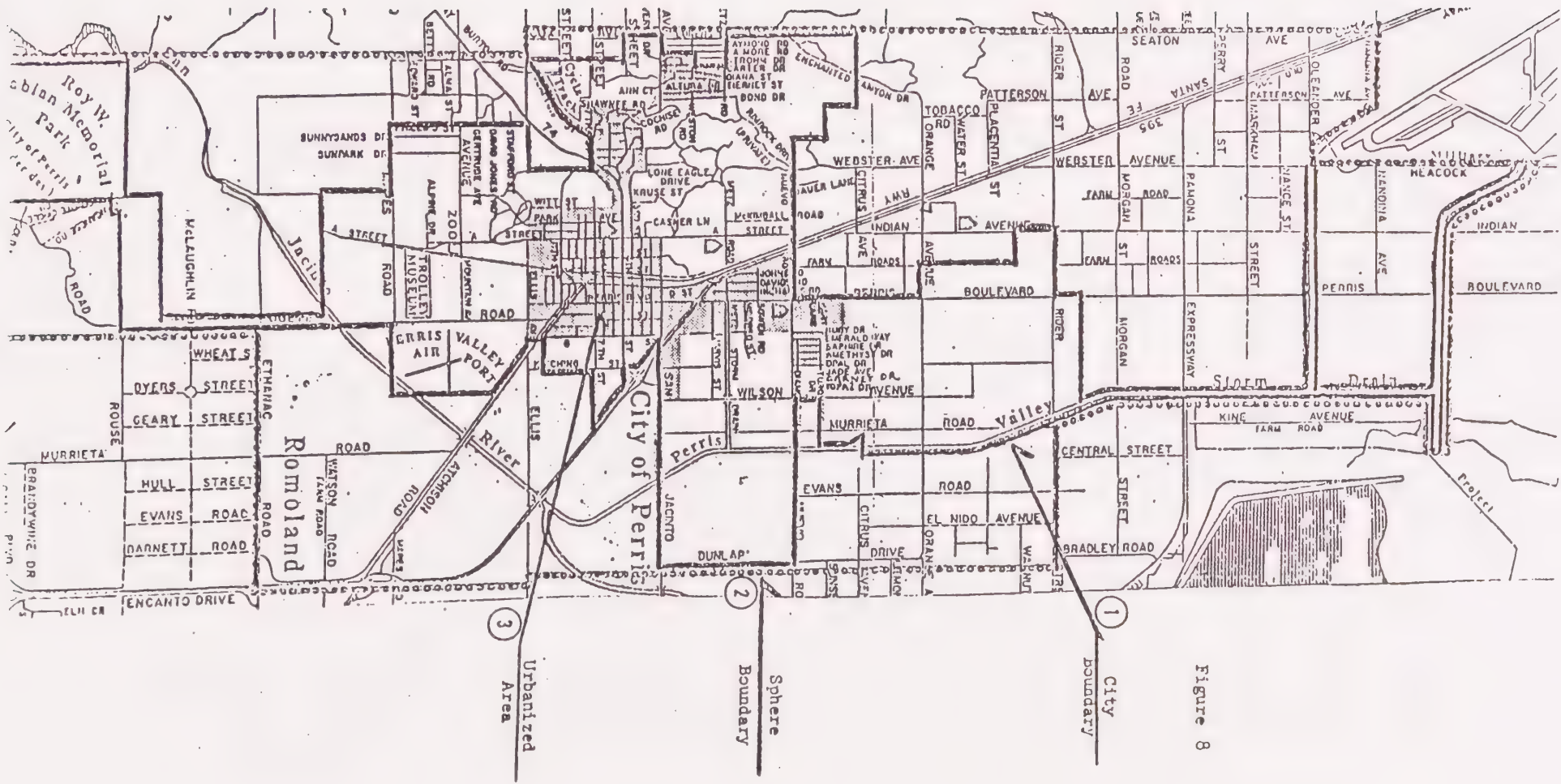


Figure 8

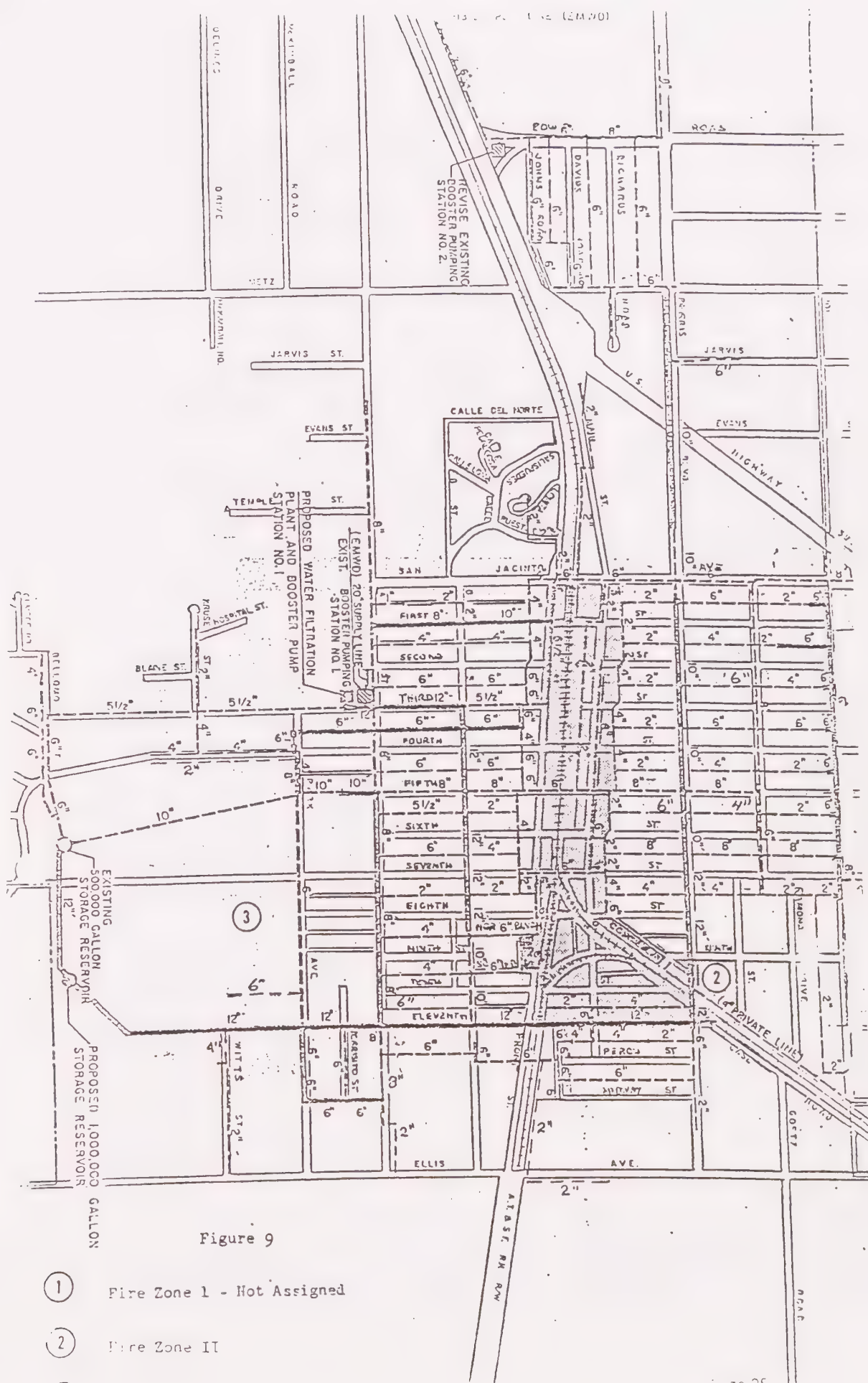


Figure 9

- ① Fire Zone 1 - Not Assigned
- ② Fire Zone II

C. Risk

The Council on Intergovernmental Relations (CIR) defines "Risk" from natural and man-made hazards in three categories:

1. Acceptable Risk: The level of risk below which no specific action by government is deemed to be necessary.
2. Unacceptable Risk: The level of risk above which specific action by government is deemed to be necessary to protect life and property.
3. Avoidable Risk: A risk which need not be taken because individual or public goals can be achieved at the same, or less, total "cost" by other means without taking the risk.

Determining levels of appropriate or acceptable risk is a multi-disciplinary process which relies heavily on citizen input. There is no such thing as a perfectly hazard-free environment. Natural and man-made hazards of some kind are always present, especially in urban areas. However, effective loss-reduction measures can be used in mitigating the consequences of known hazards. The determination of acceptable risk involves making a judgment about risk, either explicit or implicit, which is a necessary step in planning for loss-reduction from natural hazards.

The central concept used in determining acceptable risk is the definition of natural events in terms of magnitude and frequency. The magnitude of an event refers to its size. Examples are the height of flood waters, the rating of an earthquake on the Richter scale, or the number of acres burned in a wildland fire. The frequency of an event refers to the number of times it occurs during a certain period of time. That is, the less often an event occurs, the greater is its size and potential impact. For example, rainstorms occur annually in the City of Perris, but most often they are of low magnitude and do not seriously threaten the City. However, on relatively infrequent occasions, as in December of 1964, a storm of great magnitude will pass over the City and result in destructive flooding. A way of summarizing this concept with respect to an earthquake is that the longer it waits, the bigger it will be.¹

The magnitude-frequency concept is involved in the decisions regarding acceptable risk in that the community must judge what magnitude event should be planned for. The judgment is based on the frequency or recurrence interval of the hazardous event. A description of the magnitude and other characteristics of the event are then developed through a technical analysis. This information allows planners and engineers to develop loss-reduction measures and to design structures to provide protection up to the level of acceptable risk. In this sense, the magnitude earthquake or flood used in defining acceptable risk may be thought of as a "design earthquake" or "design flood."

¹There is one important difference between flooding and earthquakes, however, flooding is the result of a random combination of meteorological events, whereas current geologic theory indicates that the buildup of strain along a particular fault system is nearly constant and the periodic release of that strain in the form of an earthquake is apt to be regular.

| <u>Land Use Group</u> | <u>Facility Type</u> | <u>Facility</u> | <u>Appropriate Recurrence Interval (Years)</u> | <u>Magnitude by fault</u> <u>San Jacinto</u> |
|-----------------------|--|--|--|---|
| A | Emergency Services | Hospitals, Fire Stations, Police Stations, CO HQ, Lifeline - Gas Electric, Water, Ambulance Services, Emergency Broadcast Systems, Lifeline Telephone Systems, Power Plants (Nuclear, Fossil Fuel), Dams, Reservoirs. | Maximum Credible | 7.5* |
| B | Critical Facilities | Schools, Theaters, Auditoriums, Utility Substations, Sewage Treatment Plants, Waterworks, Local Gas and Electric Lines, Major Highways, Bridges, Tunnels, Aqueducts, Pipelines, Public Service Facilities, Public Assembly w/ Capacity of 100 or more. | 200-500 | 7.0* |
| C | <u>Normal Facilities</u> Category 1 | Heavy Industrial, Office Buildings, Commercial Centers, Hotels and Motels, Parks and Financial Establishments, High Density Residential, Public Service Stations, Health Care Clinics. | 100-200 | 6.5* |
| D | Category 2 | Light Industrial, Low Density, Residential, Warehousing and Storage, Agricultural, Parks, Convenience Centers. | 50-100 | 6.0 |

(* Ground Rupture Expected)

The determination of acceptable risk from hazardous events also involves differentiating among man-made structures according to their potential effect on the loss of life and their importance in terms of continued community functioning. In the hours immediately following the 1971 San Fernando earthquake in Southern California, emergency services were impaired by damage to police and fire stations, communication networks, and utility lines. Several hospitals were seriously damaged and unable to continue functioning. These facilities and others are vital to the community's ability to respond to a major disaster and to minimize loss of life and property. The experience in San Fernando emphasized the need to provide these "critical facilities" a higher level of protection from earthquakes than limited or normal occupancy structures or other non-critical structures. As a minimum, all structures which could have an effect on the loss of life should be designed to remain standing in the event of a major earthquake even if rendered useless. Critical facilities on the other hand, should not only remain standing, but should be able to operate at peak efficiency in the event of a disaster. The taxonomy of Critical Facilities presented is intended for use as a guide in evaluating the importance of each facility relative to overall public safety, in terms of fire, inundation, and seismic hazards.

Based on the discussion above and on input from representatives from the City of Perris, the following seismic events are recommended as the basis for establishing earthquake design standards:

TAXONOMY OF CRITICAL FACILITIES

| Land Use/Facility | Safety Characteristic | | | Classification | |
|--|-----------------------|-----------|----------|----------------|--------|
| | Potential | Emergency | Vital | Critical | Normal |
| | Effect on | Response | Function | | |
| | Loss of Life | | | | |
| <u>Developed Land</u> | | | | | |
| RESIDENTIAL | | | | | |
| Single Family | | | | | X |
| Multi-family | | | | | X |
| and Mobile Homes | | | | | X |
| Apartments | | | | | X |
| COMMERCIAL | | | | | |
| Neighborhood Centers (e.g., grocery, barber, drug store) | | | | | X |
| Community Centers (e.g., private offices, banks, restau- rants, comparison shopping) | | | | | X |
| Highway Centers (e.g., motels, fast food, restau- rants) | | | | | X |
| Heavy Commercial/ Light Industry (e.g., contractors yards, distribution warehouses, manu- facturing and assem- bly plants) | | | | | X |
| Heavy Industry | | | | | X |
| PUBLIC AND SEMI- PUBLIC USES | | | | | |
| Hospitals | | X | X | | X |
| Schools/Colleges | X | | | | X |
| Parks and Recrea- tion Areas | | | | | X |
| Government Facili- ties (e.g., civil defense quarters, fire and police stations, govern- ment offices) | | X | X | | X |

TAXONOMY OF CRITICAL FACILITIES
(continued)

| Land Use/Facility | Safety Characteristic | | | Classification | |
|---|-----------------------|-----------|----------|----------------|--------|
| | Potential | Emergency | Vital | Critical | Normal |
| | Effect on | Response | Function | | |
| | Loss of Life | | | | |
| <u>Developed Land</u> | | | | | |
| PUBLIC AND SEMI-PUBLIC USES (continued) | | | | | |
| Utilities (e.g., power plants (nuclear fossil fuel) gas and electric lines and stations, large dams, radio/TV/microwave centers and lines, aqueducts, pipelines, sewage treatment facilities, gas stations, water-works | | X | X | X | |
| Roads and Highways | | X | X | X | |
| Railroads | | | X | X | |
| Airports | | | X | X | |
| Assembly Halls (e.g., theaters, auditoriums) | X | | | X | |
| Refuse Disposal Sites | | | | | X |
| Cemeteries | | | | | X |
| <u>Undeveloped Land</u> | | | | | |
| Agriculture | | | | | X |

With respect to flood hazards, the magnitude event recommended as the basis for natural flood control and floodplain planning and management is the 100-year flood. The 100-year flood is almost universally accepted by federal and state agencies involved with flood control as the basis for describing flood hazards and establishing flood insurance and other programs. Sufficient data is not available at this time to recommend specific flood parameters for planning purposes relative to dam inundation except for evacuation purposes.

III. HAZARD REDUCTION

A. Organization And Purpose of Recommendations

The previous section of this document represents a synthesis of the existing natural hazards within the study area, and supplements the criteria documented in the Technical Section of the report. The intent of that section is to summarize the general framework within which planning for seismic safety and public safety should take place. In this section, recommendations are presented which encompass the general planning goals and policies for hazard reduction in the City of Perris. This section also outlines specific recommended planning actions to implement the Element's Goals and Policies.

B. General Goals

To plan effectively for reducing hazards to acceptable levels of risk it is necessary that goals be set and adhered to. Goals address general policy directions which form the basis for planning decisions and actions. The recommended goals for hazard reduction in the City of Perris are:

1. Create and preserve the best possible living environment for all inhabitants;
2. Attain a safe, healthy and stable living environment;
3. Manage development in order to reasonably protect inhabitants from natural hazards;
4. Educate and inform inhabitants of naturally induced and human induced safety hazards and means to mitigate or prevent loss of property and life;
5. To minimize social and economic dislocations resulting from injury, loss of life, and property damage caused by hazardous natural events.

C. Specific Goals

1. Fire

- a. Manage development in order to reasonably protect inhabitants from fire hazards;
- b. Educate and inform inhabitants of fire hazards and means to mitigate or prevent loss of life or property;
- c. Provide continued service capability based upon needs created by growth or changes in use requirements;
- d. Upgrade fire protection service rating of the community;
- e. Prevent destruction of natural and historical resources of the community.

2. Flood

- a. Manage development in order to reasonably protect inhabitants from flood hazards;
- b. Eliminate flood hazard through long range flood control measures;
- c. Reduce flood impact through immediate short term flood control measures;
- d. Prevent loss of life and reduce property damage and losses as a result of flooding.

3. Dam Inundation

- a. Prevent loss of life and minimize damage resultant from inundation;
- b. Eliminate inundation hazards through engineering and construction.

D. General Policies

The following recommended policies complement the planning goals and define specific directions for the City to take in reducing natural hazards.

1. Provide for continued research and analysis of hazards affecting the community;
2. Perform continued evaluation and recommend changes in ordinances as necessary to improve safety;
3. Impose reasonable safety-oriented restrictions upon land use and zoning actions to insure hazards have been considered prior to development;
4. Recommend construction improvements to existing and programmed structures to insure that unacceptable risk is minimized or eliminated;
5. Provide for critical facilities and their retention in case of natural disaster;
6. Formulate plans and programs to provide guidance and response principles necessary to support fire, flood, seismic and dam inundation hazards control and mitigation, and insure their continued review and updating.

E. Specific Policies

1. Fire

- a. Provide continued coordination with federal, state, county and other community agencies in research and analysis of fire safety concerns;
- b. Evaluate and recommend changes in procedures to improve fire safety;

- c. Impose reasonable safety requirements upon development, repair or rehabilitation projects to insure fire safety conditions are considered;
- d. Formulate plans and programs to provide for fire prevention, protection and disaster responses;
- e. Adopt measures to provide adequate structural fire protection for residences which are constructed in outlying areas that are subject to vegetation fire hazards.

2. Flood

- a. Perform continued research and analysis of flood hazards;
- b. Prepare flood studies and plans designed to eliminate flood hazard;
- c. Impose restrictions upon land use and zoning actions to insure flood concerns have been considered prior to development;
- d. Continue participation under National Flood Protection Act to insure availability of insurance to land owners and developers affected by the flood hazard area.

3. Dam Inundation

- a. Require continued study and evaluation of inundation hazards;
- b. Cooperate in continued planning actions to minimize dam inundation;
- c. Incorporate an adequate plan for evacuation in the event of dam inundation in the City's disaster preparedness program and activities; provide for periodic review and update of this plan.

4. Seismic

- a. Adopt new ordinances and amend existing ordinances which require the incorporation of seismic safety and safety considerations in developments under the City's jurisdiction;
- b. Provide for the identification and evaluation of existing structural hazards;
- c. Risks associated with hazardous structures should be reduced to acceptable levels through orderly hazard reduction.
- d. Provide for more detailed scientific analyses of seismic hazards in the study area;
- e. Regulate land use in areas of significant seismic hazard.

F. Implementation Measures

General:

- a. Adopt new ordinances and amend existing ordinances which require the incorporation of seismic safety and safety consideration in developments under the City's jurisdiction;
- b. Adopt the most recent edition of the Uniform Building Code as revisions are periodically made.
- c. Provide for the identification and evaluation of existing structural hazards;
- d. Risks associated with hazardous structures should be reduced to acceptable levels through orderly hazard reduction programs;
- e. A review committee should be established by the City Council to consider the desirability of initiating condemnation proceedings against structures found to be unsafe;
- f. The City should advocate the expansion of State and Federal relocation assistance funds and programs to aid persons and businesses displaced from hazardous buildings;
- g. Provide for more detailed scientific analyses of natural hazards in the study area;
- h. Regulate land use in areas of significant natural hazard;
- i. Provide for the education of the community regarding the nature and extent of natural hazards in the study area;
- j. Develop an information release program to familiarize the citizens of region with the Seismic Safety and Safety Elements. Special attention should be afforded to those groups particularly susceptible to seismic, fire, and flooding hazards including, but not limited to, school districts, agencies involved with the aged, and agencies involved with handicapped persons. These agencies should be encouraged to develop educational programs of their own relative to hazard awareness. The conclusions and recommendations of these elements should also be provided to land developers and those involved in the real estate profession. Appendix A provides a list of earthquake safety procedures;

- k. Establish community programs that train volunteers to assist police, fire, and civil defense personnel during and after a major earthquake, fire or flood;
- l. Initiate education programs in lower grades using displays and demonstrations that would expose younger children to the nature and strength of fire. Such programs would tend to replace their natural curiosity with a sense of respect;
- m. Support or sponsor exhibits and presentations in secondary schools which demonstrate the more involved aspects of fire dynamics, i.e., major contributing factors to fire hazard and the relationship of fire to the natural ecology. Encourage parental cooperation and assistance in overall fire education programs;
- n. Provide for the maintenance and upgrading of disaster response plans;
- o. Maintain a disaster response program for the City of Perris. Objections of the program should be:
 - 1. To save lives and protect property;
 - 2. To provide a basis for direction and control of emergency operations;
 - 3. To provide for the continuity of government;
 - 4. To repair and restore essential systems and services (e.g., emergency water supplies);
 - 5. To provide for the protection, use and distribution of remaining resources;
 - 6. To coordinate operations with the civil defense emergency operations or other jurisdictions;
 - 7. To provide for a maximum degree of self-sufficiency by the City in the event of a major disaster.

Since a large earthquake will severely affect many cities and hundreds of thousands of people, the efforts of the Federal and State emergency services will be severely overextended. It is advisable that the City be prepared to serve itself and maintain continued functioning of necessary services rather than expect adequate aid from outside organizations;

- p. Conduct periodic earthquake, and flooding emergency drills. These drills should be coordinated on a regional basis in cooperation with all involved jurisdictions;
- q. Provide for review and upgrading of the Seismic Safety and Safety Elements;

- r. Upon adoption of the Seismic Safety and Safety Elements, a review committee should be established to oversee the implementation of the Elements and to advise the Council of implementation progress. This committee should be composed of the Planning Director, the Director of Building and Safety, and at least one representative from each of the police and fire protection service agencies;
- s. The Seismic Safety and Safety Elements should be reviewed by the City Planning Department annually and should be comprehensively revised every five years or whenever substantially new scientific evidence becomes available.

Specific:

1. Seismic

- a. Using the geological data provided in the Seismic Safety Element, amend Chapter 23, Section 2314, (Earthquake Regulations) of the Uniform Building Code to account for the expected maximum ground accelerations of the recommended design earthquakes. Amending Section 2314 involves revising the basic lateral force equation in the section, and requires analysis by a qualified structural engineer. The intent of the revisions is to reflect the levels of acceptable risk adopted in this Element. (At this time, proposed revisions to Section 2314 are being considered by the International Conference of Building Officials for adoption in the 1976 UBC. The proposed revisions would significantly increase the minimum lateral force requirements, and could, if adopted, reduce the extent of revision necessary to amend the code in conformance with expected seismic events.)
- b. Amend Chapter 70, Section 7006, of the Uniform Building Code to require soils engineering and geological engineering investigations in areas of moderate and high landslide risk and in potential liquefaction and subsidence areas. To insure adequate review and use of the investigation reports, the City should retain a qualified engineering geologist on a full or part-time basis to review the reports and assist the Building and Safety Department in designing public projects;
- c. It is recommended that structures within the study area of this report be inspected for conformance with the amended Uniform Building Code earthquake regulations. Inspections should be conducted according to the following priorities:
 - 1. Emergency service facilities (e.g., fire and police stations, hospitals);
 - 2. Other critical facilities (e.g., schools, utility lines, government buildings);

3. High occupancy non-critical facilities (e.g., dormitories, apartments);
4. Normal or limited occupancy non-critical facilities (offices, low density residential buildings).

Within each priority group, it is recommended that facilities built before 1933 be inspected first, then those built between 1933 and 1948, and lastly, those constructed after 1948. The significance of the year 1933 is that the Field and Riley Acts became law in California that year and required reinforcement in schools and certain other structures (Appendix B). Structures built before 1933, especially larger commercial structures, are more likely to be unreinforced masonry block buildings which are most susceptible to collapse in earthquakes. In 1948, earthquake regulations were adopted as a legally binding section of the UBC for the first time. Previously, earthquake standards were not a mandated part of the Code. It is more likely, then, that a building constructed before 1948 would be less able to withstand the shock of an earthquake than one built after 1948. It is also recommended that public structures be inspected before private structures.

Table 3 (abridged from Pacific Fire Rating Bureau) may also be used as a general indicator in older construction for use in establishing a priority ranking system for evaluating structures. Buildings with a high susceptibility to damage rating (five or over) should be selected for structural inspection before those with low ratings. A high priority should be placed on establishing a definition of facilities that handle explosive, flammable, or toxic materials and on an evaluation of their seismic vulnerability.

- d. Caltrans should review its facilities and roadways within the study area to determine the potential impact of expected earthquakes, and should forward comments to the City. The Circulation Element of the General Plan and potential evacuation routes should be revised, if necessary;
- e. The Atchison, Topeka & Santa Fe Railway Company should review its lines and yards within the study area to determine the potential impact of the expected earthquakes, and should forward comments to the City. The Circulation Element of the General Plan should be revised, if necessary;
- f. The owners of any existing dams in the Perris Valley area should inspect their dams using the seismic response spectra as guidelines to determine these structure's ability to withstand expected earthquakes, and should forward comments to the City;
- g. The Southern California Gas Company and the Edison Company should review their facilities and distribution/transformation networks and centers to determine the potential impact

of expected earthquakes, and should forward comments to the city. These utilities should also review their gas and power lines for potential fire hazards in the event of an earthquakes;

- h. Structures identified as not conforming to amended earthquake standards or as hazardous in terms of fire or flooding should be brought into conformance with acceptable levels of risk by programs including, but not limited to, structural rehabilitation, occupancy reduction and demolition and reconstruction;
- i. Encourage geologic study of the potential fault (Plate I) located approximately one-half mile from Highway 395. Such appropriate geologic study should be undertaken at the EIR stage for any development proposed on or along side the suspected fault trace;
- j. Require site-by-site soils and geologic engineering studies for proposed development projects in areas of moderate to high landslide risk to assess natural and graded slope stability. Slope stability calculations should incorporate the ground shaking parameters presented in the Technical Report;
- k. Require site-by-site soils and geologic engineering studies in area of potential settlement and evaluate these potential hazards using the ground shaking parameters presented in the Technical Report;
- l. Institute a building strong-motion instrumentation program for buildings over four (4) stories in height, if such buildings are anticipated;
- m. No development should be permitted in any seismic zone unless it conforms to the recommended revised Uniform Building Code Earthquake Regulations;
- n. No development should be permitted in areas of high or moderate landslide risk without a required slope stability investigation at the site level.

2. Flood

- a. Encourage completion of the flood control studies and projects that would serve to mitigate flood problems;
- b. No emergency facilities should be permitted to locate within the 100-year flood plain. Critical facilities should be permitted in the 100-year flood plain only if adequate flood control measures are provided;
- c. Require flood control district assessment reports on all land divisions, improvements and developments lying within or suspected to be within potential flood prone areas;

- d. Maintain Master Flood Control Plan and continually recommend changes or addition comensurate to growth and identified hazards;
- e. Require strict enforcement of building requirements in flood prone areas;
- f. Limit development in flood zones to low density residential, industrial, and commercial uses on acreages of limited size;
- g. Include flood disaster response actions under the city general disaster plan.

3. Fire

- a. No emergency or critical facility should be permitted to locate in high or medium fire hazard areas without an investigation of the development's vulnerability to fire and its potential as a source of ignition;
- b. The use of untreated shake roofs in areas of high fire hazard should be prohibited; utilize the policies and development criteria of the Comprehensive General Plan relating to fire protection in outlying areas susceptible to vegetation fire hazards in the review of all new development proposals;
- c. Adopt Uniform Fire Code and Uniform Fire Standards as Municipal Fire Code and Standards;
- d. Update as necessary existing ordinances, resolutions and agreements pertaining to fire protection;
- e. Provide fire department structural, communications and equipment acquisition and upgrade through capital improvements program inclusion;
- f. Prepare fire plan which provides for increased manpower, geographic and demographic location of additional stations and equipment commensurate with community development and growth;
- g. Perform feasibility study of a combined Public Safety Department;
- h. Require fire inspections, on regular basis, of schools, public assembly buildings, civic buildings, hospitals, rest homes and homes for special occupants;
- i. Include fire disaster response actions under the City General Disaster Plan;
- j. Require new facilities to incorporate adequate fire protection systems as a portion of their plans; require existing special occupancies such as, commercial, industrial, schools, hospitals, and care centers to upgrade fire protection systems;
- k. Require fire department review of development plans as part of the site plan review process administered by City departments; institute necessary departmental fee schedule to reimburse the cost of such review.

- l. Require developers to provide for adequate fire flows through installation of adequate water service lines in developments;
- m. Perform upgrade of city water system as necessary to provide for minimum 8" service line in order to improve fire flows in the city;
- n. In view of the necessity of providing a higher degree of protection for lives and property in the City's business district as the area continues to develop, the need for and feasibility of establishing a Fire Zone I governing construction standards should be studied and an appropriate recommendation made;
- o. In order to provide an enhanced revenue source for the upgrading and expansion of the City's fire protection services commensurate with the expected increase in population and development within the City, the feasibility of a benefit assessment fee structure should be examined. As an alternative, a development fee based on square footage for new construction projects could be adopted to help cover the costs of increased staffing and equipment necessary for serving such new development.

Dam Inundation

- a. Require all private, quasi public or governmental projects which could result in increased inundation hazards to prepare environmental reports covering the degree of hazard;
- b. Cooperatively, with County Flood Control, Office of Emergency Services, Corp of Engineers, or other appropriate body, assess and define flood protection engineering and construction measures institutable to reduce inundation hazards. Measures such as widening and hardening of existing flood channels or construction of additional channels should be considered;
- c. Control development of critical facilities and residences within inundation areas to minimize inundation losses;
- d. Advise developers of inundation hazards in areas of potential development;
- e. As appropriate, require specific flood control measures to be included in any development to reasonably protect against inundation;
- f. Implement appropriate response actions in inundation areas when required by inundation plan upon receipt of warning of pending inundation. Coordinate inundation response planning with the City of Perris Emergency Operations Plan and the overall disaster response programs of the City, as well as with other affected government agencies.

TABLE 3
HAZARD COMPARISON OF NON-EARTHQUAKE-RESISTIVE BUILDINGS

| Simplified Description of Structural Type | Relative Damagability (in order of increasing susceptibility to damage) |
|--|---|
| Small wood-frame structures, i.e., dwellings not over 3,000 sq. ft. and not over 3 stories | 1 |
| Single or multistory steel-frame buildings with concrete exterior walls, concrete floors, and con- crete roof. Moderate wall openings | 1.5 |
| Single or multistory reinforced- concrete buildings with concrete ex- terior walls, concrete walls, and con- crete roof. Moderate wall openings | 2 |
| Large area wood-frame buildings and other wood frame buildings | 3 to 4 |
| Single or multistory steel-frame buildings with unreinforced masonry exterior wall panels; concrete floors and concrete roof | 4 |
| Single or multistory reinforced- concrete frame buildings with unrein- forced masonry exterior wall panels, concrete floors and concrete roof | 5 |
| Reinforced concrete bearing walls with supported floors and roof of any mater- ial (usually wood) | 5 |
| Buildings with unreinforced brick mas- onry having sand-line mortar; and with supported floors and roof of any material (usually wood) | 7 up |
| Bearing walls of unreinforced adobe, unreinforced hollow concrete block, or unreinforced hollow clay tile | Collapse hazard in moderate shocks |

This table is intended for buildings not containing earthquake bracing, and in general, is applicable to most older construction. Unfavorable foundation conditions and/or dangerous roof tanks can increase the earthquake hazard greatly.

IV. RELATIONSHIPS TO OTHER GENERAL PLAN ELEMENTS

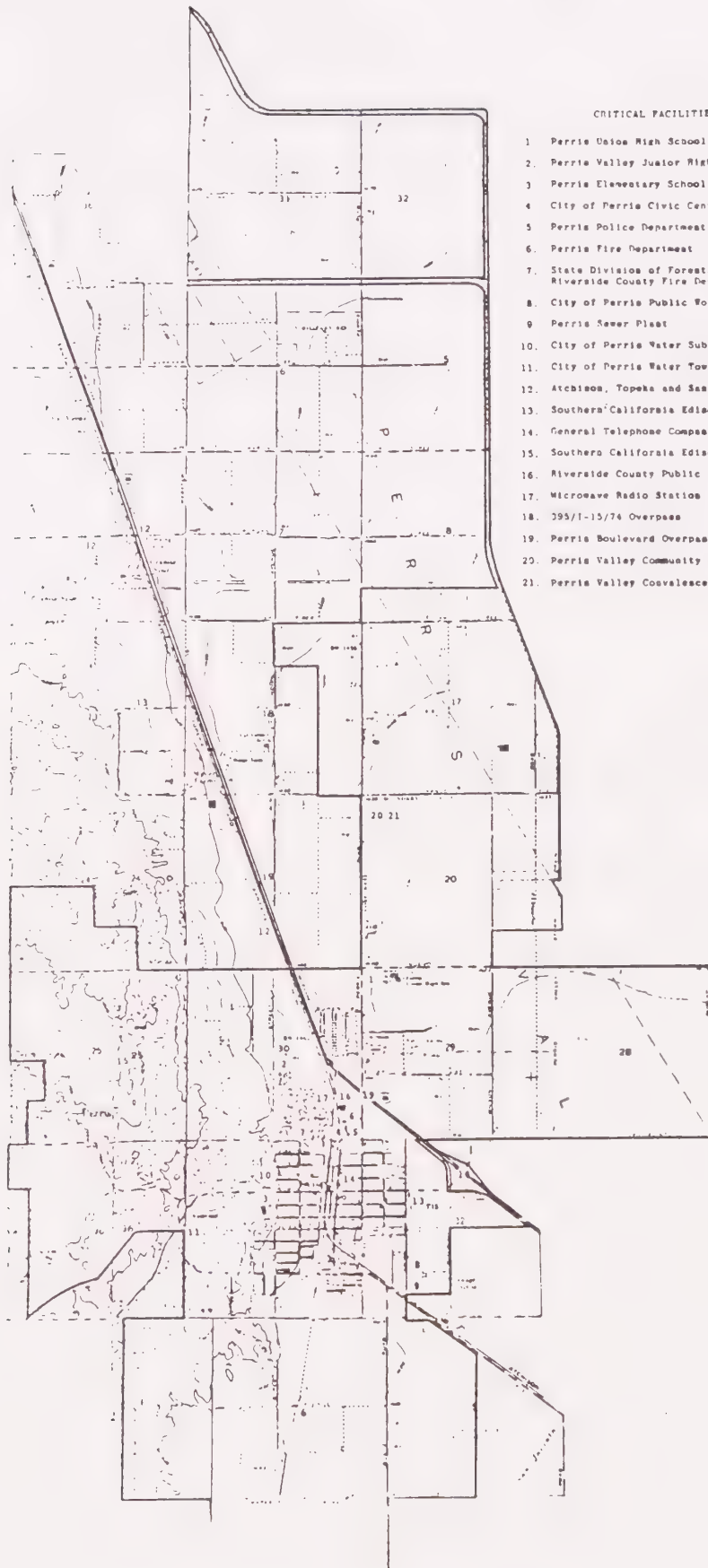
The Seismic Safety and Safety Elements are the major natural hazards analysis in the General Plan and, as such, have important policy implications for other elements in the Plan. In particular, the Seismic Safety and Safety Elements provide significant information for the Land Use, Housing, Open Space, and Circulation Elements. It is recommended that these Elements be prepared or revised to give specific recognition to the policies adopted in the Seismic Safety and Safety Elements.

The Land Use Element will be influenced most directly by the recommendations to regulate land use in areas of significant natural hazards. The Land Use Element may also recommend land use controls for those areas in which "stacking" or combinations of individual hazard zones result in a high level of overall hazard. Figure 7 shows the effects of "stacking" on various land uses.

The policies of these Elements provide input to the Housing Element primarily by recommending design and construction modifications. The following recommendations pertain directly to the Housing Element:

1. All new construction should conform to the revised Uniform Building Code Earthquake Regulations.
2. Existing high occupancy residential structures found to be seismically vulnerable should be strengthened or replaced or their occupancy level should be reduced.
3. Construction on the 100-year flood plain should provide adequate flood-proofing, if other flood control measures are not implemented.

The Seismic Safety and Safety Element identify certain areas which should be considered for open space designation a part of the Open Space Element. These areas include lands designated as high landslide risk areas, areas of high liquefaction potential, the 100-year flood plain, and areas subject to inundation immediately beneath major dams.



CRITICAL FACILITIES

1. Perris Union High School
2. Perris Valley Junior High School
3. Perris Elementary School
4. City of Perris Civic Center
5. Perris Police Department
6. Perris Fire Department
7. State Division of Forestry/
Riverside County Fire Department
8. City of Perris Public Works Department
9. Perris Sewer Plant
10. City of Perris Water Substation
11. City of Perris Water Tower
12. Atchafalaya, Topeka and Santa Fe Railway
13. Southern California Edison Company
14. General Telephone Company
15. Southern California Edison Substation
16. Riverside County Public Services Offices
17. Microwave Radio Station
18. 195/1-15/74 Overpass
19. Perris Boulevard Overpass
20. Perris Valley Community Hospital
21. Perris Valley Convalescent Hospital

The Circulation Element should recognize that the transportation network north of Perris will be hard hit in the event of a major earthquake or flood. An earthquake will affect primarily freeway overpasses, road bridges, and railroad grade crossings. The effects expected will be similar to what occurred in the Sylmar-San Fernando Valley area of Southern California in the 1971 earthquake. The response spectra presented in the Technical Section of the Seismic Safety Element should be used by structural engineers in the evaluation of existing freeway overpasses and other important grade separations. New construction of bridges, overpasses, and other grade crossings should also utilize seismic response design criteria.

In the event of a 100-year flood, Highway 395 which traverses north of the City can expect to be inundated. This is expected to have an important impact on potential evacuation of the area, and alternate evacuation measures should be planned.

APPENDIX A

Earthquake Safety Procedures

EARTHQUAKE SAFETY PROCEDURES

Before An Earthquake

1. Potential earthquake hazards in the home should be removed or corrected. Top-heavy objects and furniture, such as bookcases and storage cabinets, should be fastened to the wall and the largest and heaviest objects placed on lower shelves. Water heaters and other appliances should be firmly bolted down, and flexible connections should be used whenever possible.
2. Supplies of food and water, flashlight, a first-aid kit, and a battery-powered radio should be set aside for use in emergencies. Of course, this is advisable for other types of emergencies, as well as for earthquakes.
3. One or more members of the family should have a knowledge of first aid procedures because medical facilities nearly always are overloaded during an emergency or disaster, or may themselves be damaged beyond use.
4. All responsible family members should know what to do to avoid injury and panic. They should know how to turn off the electricity, water, and gas; they should know the locations of the main switch and valves. This is particularly important for teenagers who are likely to be alone with smaller children.
5. It is most important for a resident of California to be aware that this is "earthquake country" and that earthquakes are most likely to occur again where they have occurred before. Building codes that require earthquake-resistant construction should be vigorously supported and, when enacted into law, should be rigorously enforced. If effective building codes and grading ordinances do not exist in your community, support their enactment.

During An Earthquake

1. The most important thing to do during an earthquake is to remain calm. If you can do so, you are less likely to be injured. If you are calm, those around you will have a greater tendency to stay calm, too. Make no moves or take no action without thinking about the possible consequences. Motion during an earthquake is not constant; commonly, there are a few seconds between tremors.
2. If you are inside a building, stand in a strong doorway or get under a desk, table, or bed. Watch for falling plaster, bricks, light fixtures, and other objects. Stay away from tall furniture, such as china cabinets, bookcases, and shelves. Stay away from windows, mirrors, and chimneys. In tall buildings, it is best to get under a desk if it is securely fastened to the floor, and to stay away from windows or glass partitions.
3. Do not rush outside. Stairways and exits may be broken or may become jammed with people. Power for elevators and escalators may have failed. Many of the 115 persons who perished in Long Beach and Compton in 1933 ran outside only to be killed by falling debris and collapsing chimneys. If you are in a crowded place such as a theater, athletic stadium, or store, do not rush for an exit because many others will do the same thing. If you must leave a building, choose your exit with care and, when going out, take care to avoid falling debris and collapsing walls or chimneys.

4. If you are outside when an earthquake strikes, try to stay away from high buildings, walls, power poles, lamp posts, or other structures that may fall. Falling or fallen electrical power lines must be avoided. If possible, go to an open area away from all hazards but do not run through the streets. If you are in an automobile, stop in the safest possible place, which, of course, would be an open area, and remain in the car.

After An Earthquake

1. After an earthquake, the most important thing to do is to check for injuries in your family and in the neighborhood. Seriously injured persons should not be moved unless they are in immediate danger of further injury. First aid should be administered, but only by someone who is qualified.

2. Check for fires and fire hazards. If damage has been severe, water lines to hydrants, telephone lines, and fire alarm systems may have been broken; contacting the fire department may be difficult. Some cities, such as San Francisco, have auxiliary water systems and large cisterns in addition to the regular system that supplies water to fire hydrants. Swimming pools, creeks, lakes and fish ponds are possible emergency sources of water for fire fighting.

3. Utility lines to your house - gas, water, and electricity - and appliances should be checked for damage. If there are gas leaks, shut off the main valve which is usually at the gas meter. Do not use matches, lighters, or open-flame appliances until you are sure there are no gas leaks. Do not use electrical switches or appliances if there are gas leaks, because they give off sparks which could ignite the gas. Shut off the electrical power if there is damage to the wiring; the main switch usually is in or next to the main fuse or circuit breaker box. Spilled flammable fluids, medicines, drugs, and other harmful substances should be cleaned up as soon as possible.

4. Water lines may be damaged to such an extent that the water may be off. Emergency drinking water can be obtained from water heaters, toilet tanks, canned fruits and vegetables, and melted ice cubes. Toilets should not be flushed until both the incoming water lines and outgoing sewer lines have been checked to see if they are open. If electrical power is off for any length of time, plan to use the foods in your refrigerator and freezer first before they are spoiled. Canned and dried foods should be saved until last.

5. There may be much shattered glass and other debris in the area, so it is advisable to wear shoes or boots and a hard hat if you own one. Broken glass may get into foods and drinks. Liquids can be either strained through a clean cloth such as a handkerchief or decanter. Fireplaces, portable stoves or barbecues can be used for emergency cooking but the fireplace chimney should be carefully checked for cracks and other damages before being used. In checking the chimney for damage, it should be approached cautiously, because weakened chimneys may collapse with the slightest of aftershocks. Particular checks should be made of the roof line and in the attic because unnoticed damage can lead to a fire. Closets and other storage areas should be checked for objects that have been dislodged or have fallen, but the doors should be opened carefully because of objects that may have fallen against them.

6. Do not use the telephone unless there is a genuine emergency. Emergencies, and damage reports, alerts, and other information can be obtained by turning on your radio. Do not go sightseeing; keep the streets open for the passage of emergency vehicles and equipment. Do not speculate or repeat the speculations of other - this is how rumors start.

7. Stay away from beaches and other waterfront areas where seismic sea waves (tsunamis), sometimes called "tidal waves", could strike. Again, your radio is the best source of information concerning the likelihood that a seismic sea wave will occur. Also stay away from steep landslide-prone areas if possible, because aftershocks may trigger a landslide or avalanche, especially if there has been a lot of rain and the ground is nearly saturated. Also stay away from earthquake-damaged structures. Additional earthquake shocks known as "aftershocks" normally occur after the main shock, sometimes over a period of several months. These are usually smaller than the main shock but they can cause damage, too, particularly to damaged and already weakened structures.

8. Parents should stay with young children who may suffer psychological trauma if parents are absent during the occurrence of aftershocks.

9. Cooperate with all public safety and relief organizations. Do not go into damaged areas unless authorized; you are subject to arrest if you get in the way of, or otherwise hinder, rescue operations. Martial law has been declared in a number of earthquake disasters. In the 1906 disaster in San Francisco, several looters were shot.

10. Send information about the earthquake to the Seismological Field Survey to help earth scientists understand earthquakes better.

APPENDIX B

Summary Of Significant Court
Decisions And Legislation

SUMMARY OF SIGNIFICANT COURT DECISIONS
AND LEGISLATION

(Source: Urban Geology Master Plan For California, 1973)

In recent years there have been many attempts by government to reduce losses from geologic hazards. The following summaries are some of the more important ones.

Court Decisions

1. Sheffett decision (Los Angeles Superior Court Case No. 32487): Declared that a public entity is liable for damages to adjacent property resulting from improvements planned, specified or authorized by the public entity in the exercise of its governmental power. (The State Supreme Court refused to rehear this decision, which establishes a judicial precedent.)
2. L.A. County Superior Court (Case No. 684595 and consolidated cases): This decision found the County liable for damages which may have resulted from roadwork and the placement of fill by the County. This case was in regard to the Portuguese Bend landslide, Palos Verdes Hills, Los Angeles County, California.
3. City of Bakersfield vs Miller (48 Cal. Rptr. 889), heard in the State Supreme Court 1966: This decision affirms that the city may declare an older structure not in compliance with the newly adopted Uniform Building Code to be a public nuisance. Further, the city may enforce abatement of the non-conforming condition even though to do so may require the building to be demolished.
4. Burgess vs. Conejo Valley Development Co. (Connor vs. Great Western Savings and Loan Association) (73 Cal. Rptr. 369) heard in the State Supreme Court in 1968, concerning damage to tract homes from expansive soil in Thousand Oaks, Ventura County: This decision affirmed that the home buyer, both first buyer and all subsequent ones, has the right to protection from negligent construction practice leading to damage. In this case, neither contractor, county inspectors, nor representatives of the major lending institution acted to ascertain expansive soil conditions, or to prevent damage from them.
5. Oakes vs. The McCarthy Co. (California Appellate Reports, 2d Series, 267, 1968) the court held that in the Palos Verdes area, Los Angeles County, a developer and soils engineering company could be liable in negligence for damages to a home resulting from using improper (clay) fill material and improperly compacting that fill so that earth movement resulted. Also, the court awarded punitive damages against the developer for fraudulent concealment of material facts concerning the property, i.e., failure to volunteer to the prospective buyer that the house was built upon fill.

Legislation

PUBLIC RESOURCES CODE

Section 660-662 and 2621-2625: These sections require the State Geologist to delineate special studies zones encompassing potentially and recently active fault traces. It requires cities and counties to exercise specified approval authority with respect to real estate developments of structures for human occupancy within such delineated zones.

Section 2700-2708: These sections require the Division of Mines and Geology to purchase and install strong-motion instruments (to measure the effects of future earthquakes) in representative structure and geologic environments throughout the state.

Section 2750: Establishes a state mining and minerals policy which, among other things, encourages wise use of mineral resources.

EDUCATION CODE

Section 15002.1: This section requires that geological and soils engineering studies be conducted on all new school sites and on existing sites where deemed necessary by the Department of General Services.

Section 15451-15466: These sections constitute the Field Act and require that public schools be designed for the protection of life and property. These sections, enacted in 1933 after the Long Beach earthquake, are enforced by the State Office of Architecture and Construction in accordance with regulations contained in Title 21 of the California Administrative Code.

HEALTH AND SAFETY CODE

Sections 15000 et seq.: These sections require that geological and engineering studies be conducted on each new hospital or additions affecting the structure on an existing hospital, excepting therefrom one story Type V buildings 4000 sq. ft. or less in area.

Sections 19100-19150: These sections constitute the Riley Act and require certain buildings to be constructed to resist lateral forces, specified in Title 24 California Administrative Code.

Sections 17922, 17951-17958.7: These sections require cities and counties to adopt and enforce the Uniform Building Code, including a grading section (chap. 70), a minimum protection against some geologic hazards.

BUSINESS AND PROFESSIONAL CODE

Section 7800-7887: These sections provide for the registration of geologists and geophysicists, and the certification of certain geologists in the specialty of engineering geology.

Section 11010: This section requires that a statement of the soil conditions be prepared and needed modifications be carried out in accordance with the recommendations of a registered civil engineer.

Section 11100-11629: These sections require studies in subdivisions to evaluate the possibilities of flooding and unfavorable soils.

GOVERNMENT CODE

Section 8589.5: This section requires that inundation maps and emergency evacuation plans be completed for areas subject to inundation by dam failure.

Section 65300-65302.1: These sections require that each city and county shall adopt the following elements:

Seismic Safety Element consisting of the identification and appraisal of seismic hazards including an appraisal of landsliding due to seismic events.

Conservation element including the conservation, development and utilization of minerals.

Safety element including protection of the community from geologic hazards including mapping of known geologic hazards.

APPENDIX C

General Characteristics Of Earthquakes

A. GENERAL CHARACTERISTICS OF EARTHQUAKES

1. The Source Of Earthquakes

Earth scientists are generally agreed that earthquakes originate as the result of an abrupt break or movement of the rock in the relatively brittle crust of the earth. The earthquake is the effect of the shock waves generated by the break, much the same as sound waves (a noise) are generated by breaking a brittle stick. If the area of the break is small and limited to the deeper part of the crust, the resulting earthquake will be small. However, if the break is large and extends to the surface, then the break can result in a major earthquake.

These breaks in the earth's crust are called faults. In California, faults are extremely common, and vary from the small breaks of an inch or less that can be seen in almost any road-cut, to the larger faults such as the San Andreas on which movement over many millions of years has amounted to hundreds of miles. In addition to the size of faults, their "age" is also important. Many large faults have not moved for millions of years; they are considered "dead" or "inactive." They were probably the source of great earthquakes millions of years ago but are not considered dangerous today.

Since faults vary as to the likelihood of their being the source of an earthquake, considerable effort has, and is continuing to be expended by geologists and seismologists to determine and delineate the faults likely to generate significant earthquakes. These faults are classified generally as follows:

- (1) An historically active fault is one which is known to have slipped during historical time, or one which is associated with an alignment of earthquake epicenters. In California this "historical time" span is limited to approximately 150 years.
- (2) An active fault is one that has moved in the recent geologic past, and that can be expected to move again in the foreseeable future. The "recent geologic past" is generally interpreted to include recent geologic time; a period of approximately 10,000 years. However, a precise definition of "active fault," such as is needed where the term is included in legal documents, is still a matter of considerable debate.
- (3) A potentially active fault is one that lacks the criteria to be classified as active, but which must be considered suspect because of offset of Quaternary sediments (up to approximately 2 million years old) or the presence of scattered earthquake epicenters. This classification, may be applied as much due to lack of definitive data as to the presence of data that definitely precludes recent movement.

2. Describing An Earthquake

Several terms are used to describe the location, "size," and effects of an earthquake. A clear understanding of the meaning of these terms and their limitations is essential to an understanding of the results of the investigation.

The location of an earthquake is generally given as the epicenter of the earthquake. This is a point on the earth's surface vertically above the hypocenter or focus of the quake. The latter is the point from which the shock waves first emanate. However, as discussed, above, earthquakes originate from faults. These are surfaces not points, so the hypocenter is only one point on the surface (or volume) that is the source of the earthquake.

Magnitude describes the size of the earthquake itself. Technically, it is defined as the logarithm of the maximum amplitude recorded on a standard seismograph at 100 kilometers (62 miles) from the epicenter. The most important part of this definition is that it is a logarithmic scale and an increase of one in magnitude (e.g., magnitude 5.0 to 6.0) represents an increase of 10 in the amplitude of the recorded waves. It should also be noted that the magnitude of an earthquake is determined at a considerable distance from the epicenter of the earthquake, and that it is based on ground displacement rather than ground acceleration.

Intensity describes the degree of shaking in terms of the damage at a particular location. The scale used today is the Modified Mercalli Scale, and is composed of 12 categories (I to XII) of damage as described in Table 1. The Roman numerals are used to emphasize that the units in the scale are discrete categories rather than a continuous numerical sequence as is the magnitude scale. It is important to remember that intensity is a very general description of the effects of an earthquake, and depends not only on the size of the quake and the distance to its center but also on the quality of the construction that has been damaged and the nature of local ground conditions.

3. Occurrence And Recurrence Of Earthquakes

Earthquakes have had in the past a certain occurrence in space and time. These occurrences may or may not set certain patterns that can form the basis for predicting their occurrence in the future. When such occurrences are analyzed in time, certain characteristics may statistically recur at definite intervals. If it can be shown that a particular magnitude earthquake recurs on a fault on the average of a certain number of years, this number can be said to be the recurrence interval for the magnitude. If the interval of time is set (e.g., a 100-year period), then earthquakes of a particular magnitude will recur a certain number of times in the specified period.

In California, as in most large areas, small earthquakes occur much more often than large earthquakes. Also, there is a fairly definite pattern in that the logarithm of the number of events of a particular magnitude that have occurred in the past is approximately proportional to the magnitude of those events. This relationship appears to apply to larger areas such as California and western Nevada, some smaller areas such as the Los Angeles Basin, and to some faults such as the Newport-Inglewood. However,

TABLE 1.
MODIFIED MERCALLI INTENSITY SCALE OF 1931
(from United States Earthquakes)

| Intensity | Description of Damage |
|-----------|--|
| I | Not felt except by a very few under specially favorable circumstances. (I Rossi-Forel Scale) |
| II | Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing. (I to II Rossi-Forel Scale) |
| III | Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motorcars may rock slightly. Vibration like passing of truck. Duration estimated. (III Rossi-Forel Scale) |
| IV | During the day, felt indoors by many, outdoors by few. At night, some awakened. Dishes, windows, doors disturbed; walls make creaking sound. Sensation like heavy truck striking building. Standing motorcars rocked noticeably. (IV to V Rossi-Forel Scale) |
| V | Felt by nearly everyone, many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop. (V to VI Rossi-Forel Scale) |
| VI | Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight. (VI to VII Rossi-Forel Scale) |
| VII | Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerably in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motorcars. (VIII Rossi-Forel Scale) |
| VIII | Damage slight in specially designed structures; considerable in ordinary, substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motorcars disturbed. (VIII to IX Rossi-Forel Scale) |
| IX | Damage considerable in specially designed structures; well-designed, frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken. (IX Rossi-Forel Scale) |

TABLE 1.
MODIFIED MERCALLI INTENSITY SCALE OF 1931
(from United States Earthquakes)
(continued)

| Intensity | Description of Damage |
|-----------|--|
| X | Some well-built wooden structures destroyed; most masonry and frame structures destroyed with their foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks. (X Rossi-Forel Scale) |
| XI | Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly. |
| XIII | Damage total. Waves seen on ground surfaces. Lines of sight and level distorted. Objects thrown upward into air. |

In California, as in most large areas, small earthquakes occur much more often than large earthquakes. Also, there is a fairly definite pattern in that the logarithm of the number of events of a particular magnitude that have occurred in the past is approximately proportional to the magnitude of those events. This relationship appears to apply to larger areas such as California and western Nevada, some smaller areas such as the Los Angeles Basin, and to some faults such as the Newport-Inglewood. However, this relationship does not apply to all faults, and it should be applied to small areas, such as cities or individual sites, with great care.

B. ENGINEERING CHARACTERISTICS OF EARTHQUAKES

The data of seismologists and geologists are, in general, not applicable to the engineering design of earthquake-resistant structures. The seismograph, for example, is a very sensitive instrument designed only to record earthquakes at great distances. A level of shaking that would be meaningful to an engineer in designing a building would put most seismographs completely off-scale.

As a result, it has been necessary to design and install special instruments to record the strong motion of earthquakes that are of interest to the engineer in the design of earthquake-resistant structures. The first such instruments, principally accelerographs and seismoscopes, were installed by the U.S. Coast and Geodetic Survey in the late 1920's and the 1933 Long Beach earthquake was the first real test of the system. The motions were apparently stronger than expected, and the accelerograph record from Long Beach itself has never been adequately deciphered. Since that time, the instrumentation and analytical techniques have been continuously improved, and many excellent records have been obtained of the more recent strong earthquakes.

The following sections are a brief introduction to the concepts, data, and application of strong-motion records. The science is relatively young, and tends to grow in bursts following the recording of a damaging earthquake.

1. Acceleration, Velocity, and Displacement

The accelerograph is a short-period instrument (in contrast to the seismograph), and measures the acceleration of the ground or the structure on which it is mounted. Figure 1 shows the ground acceleration recorded just a few hundred feet from the fault during the 1966 Parkfield earthquake. The velocity and displacement curves have been derived from it by integration. It is a particularly good example of the relationships of these three parameters of motion because of the relatively "clean", single-displacement pulse that corresponds to two velocity peaks and four acceleration peaks. Figure 2 shows the more typically complex record of the San Fernando earthquake as recorded at Pacoima Dam. Neither of the two, however, are typical records in terms of accelerations recorded. The Pacoima record shows the largest acceleration recorded to date (1.25g), and the Parkfield record (0.5g) was the largest before the San Fernando earthquake.

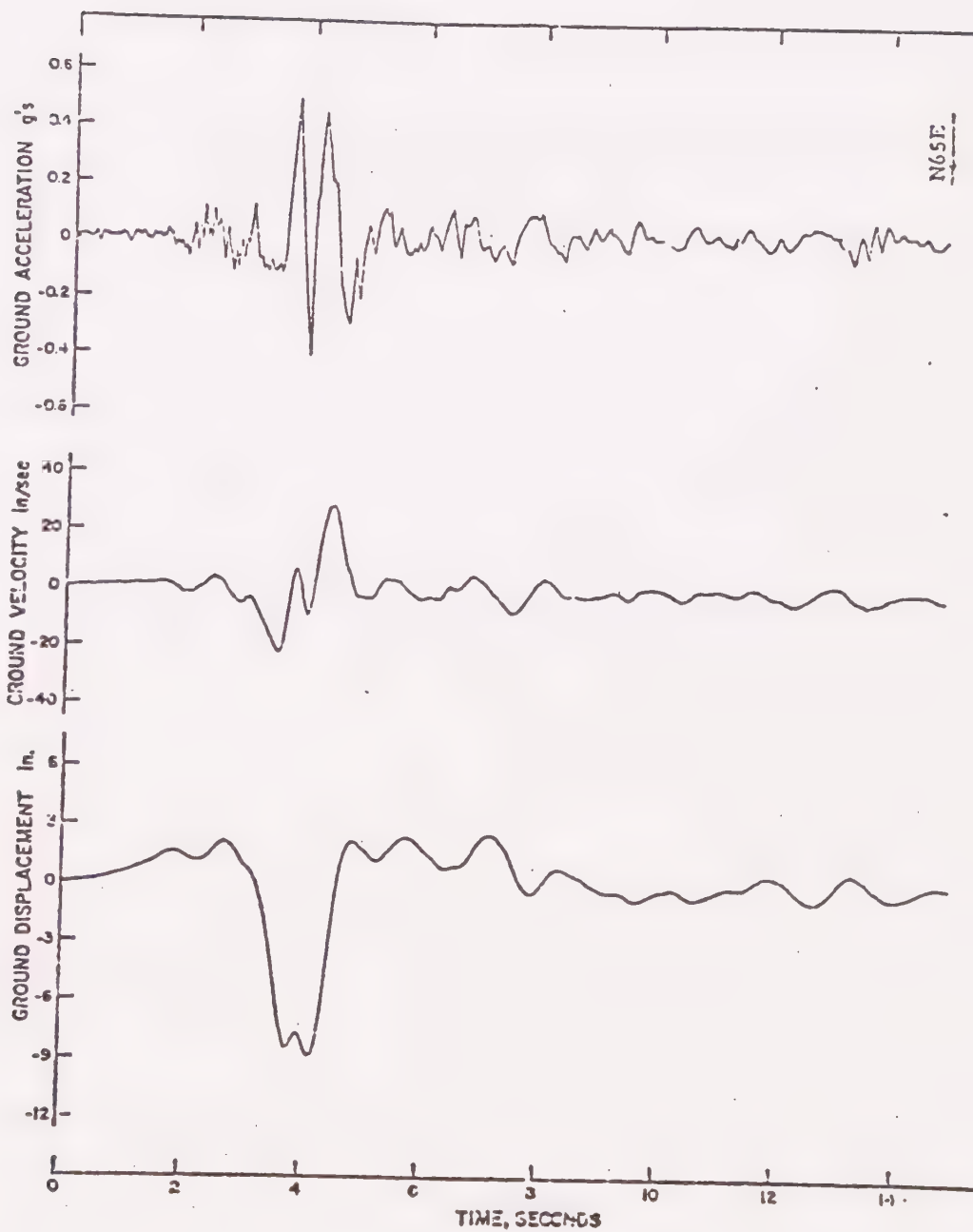
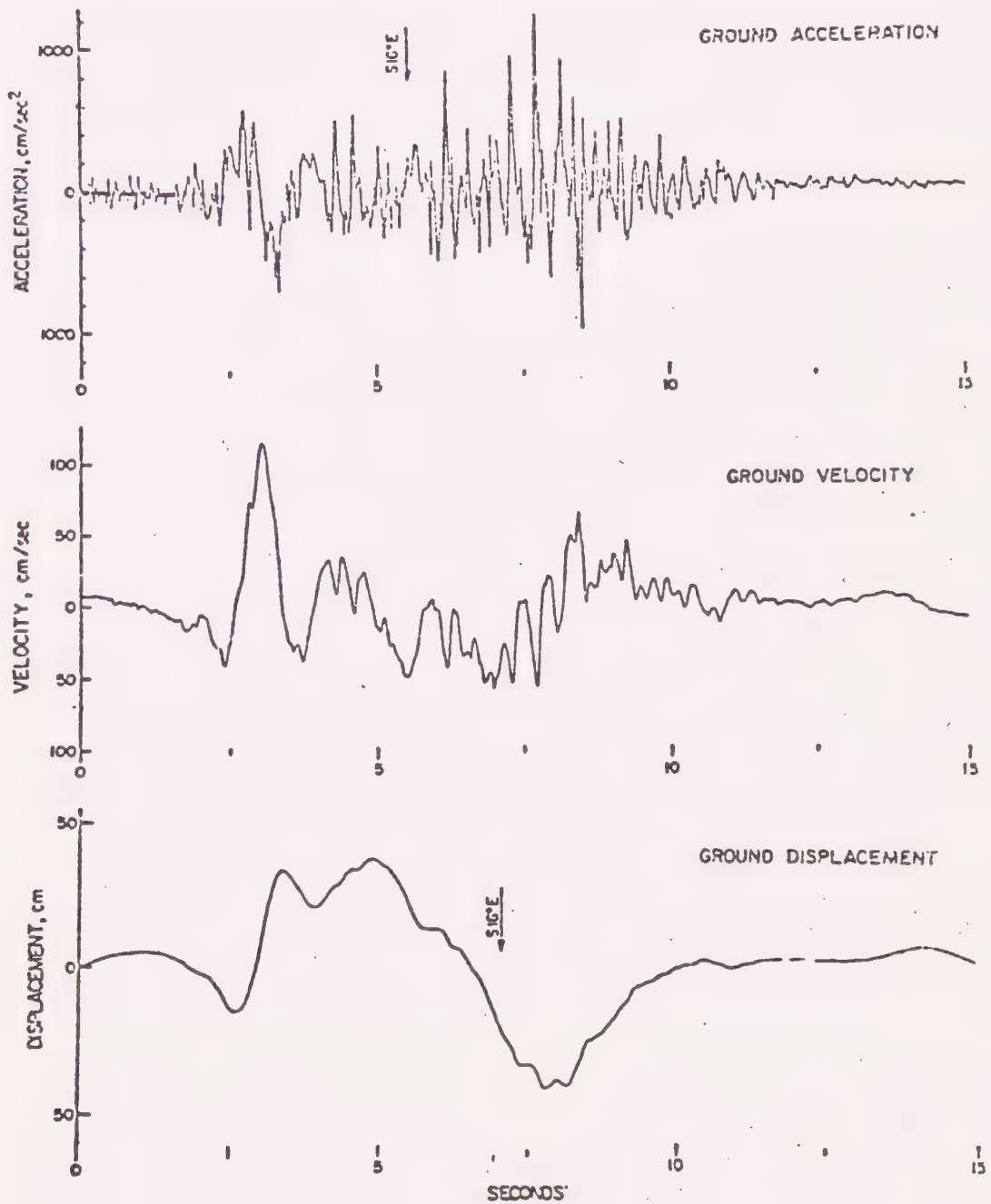


Figure 1.

Station 2 N65E Motion.

from Housner & Trifunac, 1957



Acceleration, velocity and displacement in the S16°E direction during the main event of the San Fernando earthquake of February 9, 1971, 06:00 (PST).

Figure 2.

from Trifunac & Hudson, 1971

It should also be noted that accelerographs normally record three components; two in the horizontal plane at right angles to each other, and one vertical. Only one component is shown in each of the two examples.

Maximum acceleration is one of the basic parameters describing ground shaking, and has been the one most often requested by agencies such as FHA in determining the earthquake hazard to residential structures. It is particularly important for "low-rise" construction (up to 3 to 5 seconds) and other structures having natural periods in the range of 0.3 - 0.5 seconds or less.

2. Frequency Content - Fourier and Response Spectra

The frequency content of the ground motion is particularly important for the intermediate and higher structures. The problem can be compared to pushing a child in a swing. If the pushes are timed to coincide with the natural period of the swing, then each push makes the swing go higher. However, if the timing is not right, then most of the push is lost "fighting" the natural period of the swing. The situation is similar during earthquakes. Structures have certain periods of vibration. If the pulses of the earthquake match the natural period of the structure, even a moderate earthquake can cause damaging movement. However, if the match is poor, the movement and resulting damage will be much less.

Two methods are commonly used to analyze and display the frequency content of an earthquake. A Fourier analysis is a common mathematical method of deriving the significant frequency characteristics of a time-signal such as the record of an earthquake. The results of the analysis are an amplitude term and a phase term. The amplitude is normally plotted against the period for that amplitude to give a Fourier amplitude spectrum for the range of frequencies that are of interest. Since the mathematical procedure is basically an integration of acceleration with time, the Fourier amplitude has the units of velocity.

A response spectrum is derived by a similar mathematical process, but is slightly different in concept. It represents the maximum response of a series of oscillators, having particular periods and damping, when subjected to the shaking of the earthquake. The result is also expressed in terms of velocity with the particular nomenclature depending on the precise method used to derive the spectrum.

The Fourier spectrum can be generally described as the energy available to shake structures having various natural frequencies. The response spectrum gives the effect, in maximum velocity, of this available energy on simple structures having various frequencies and damping. At zero damping the two are very similar. Figure 3 shows a plot of both the Fourier spectrum and the response spectrum with zero damping for the Taft earthquake of 1952. Figure 4 shows the response spectrum for the Parkfield record (Figure 1) for several levels of damping.

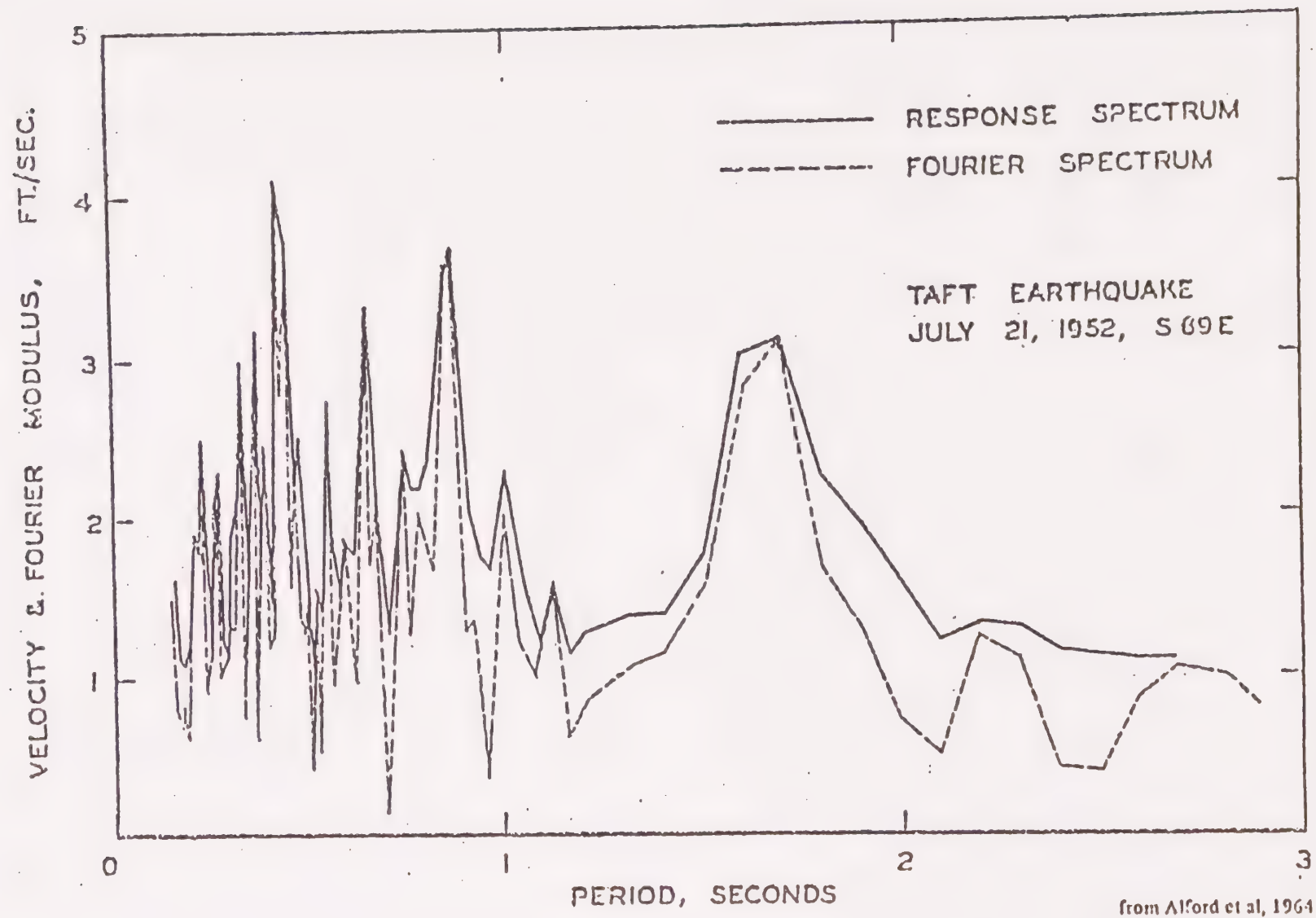
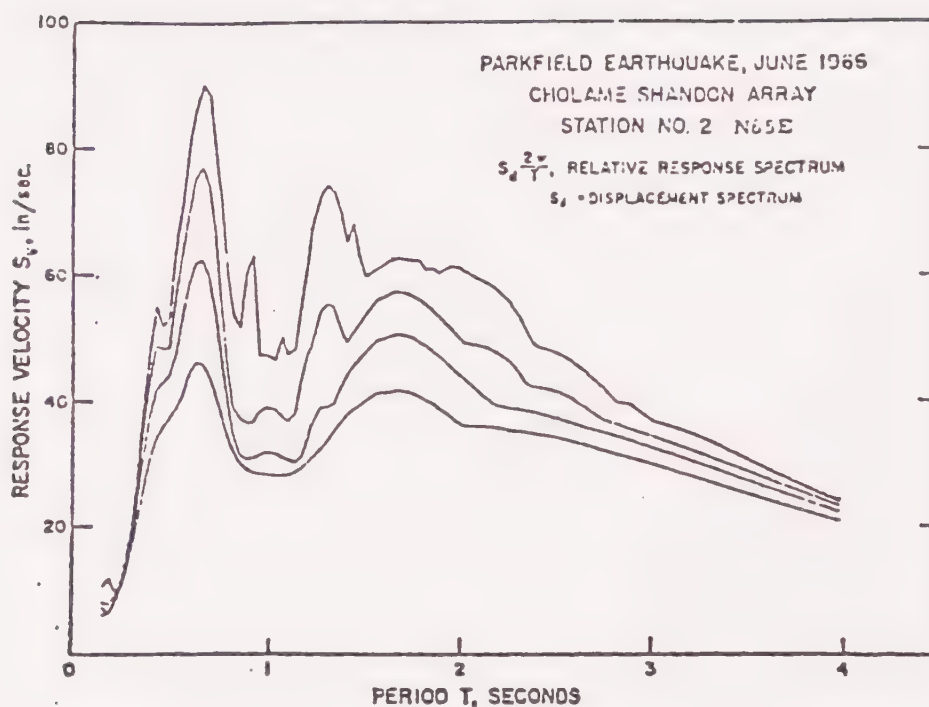


Figure 3



Response Spectra, Station 2-N65E. The curves are for 0, 2, 5 and 10% damping

Figure 4

from Housner & Trifunac, 1967

3. Near-Surface Amplification

The shock waves of an earthquake radiate outward from the source (i.e., the slipped fault) through the deeper and relatively more dense parts of the earth's crust. In this medium the waves travel at high velocity and with relatively low amplitude. However, as they approach the surface, the velocity of the medium decreases and may become quite variable if layers of different rock types are present. The overall effect is generally an amplification of the wave or of certain frequencies within the spectrum of the wave.

The most consistently applicable effect is the increase in wave amplitude that accompanies the decrease in velocity. This relationship can be compared to laws of mechanics that require the conservation of energy and momentum. In the case of earthquake waves, the energy of velocity is transferred to energy of wave amplitude when the velocity decreases.

PERRIS



GENERAL PLAN

Report No. 1553-85
September 1985

NOISE ELEMENT OF
THE GENERAL PLAN
FOR THE CITY OF PERRIS

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INTRODUCTION

Physical health, psychological stability, social cohesion, property values, and economic productivity are factors affected by excessive amounts of noise. Noise, as it has been simply defined, is "unwanted sound". It is an undesirable byproduct of transportation elements and industrial activities within the community that permeates man's environment and causes disturbance. The full effect of such noise on the individual and the community will vary with its duration, its intensity, and the tolerance level of the individual.

AUTHORIZATION

Recognizing the increasing human environmental impacts of noise pollution and the impact that local agency land uses and circulation plans have on the community's environmental quality, the California Legislature, in 1972, mandated that a noise element be included as part of the City and County general plans. Guidelines have been prepared as a result of Senate Bill 860(A) (effective January 1, 1976) by the Office of Noise Control, State Department of Health, concerning the specific requirements for a noise element which are responsive to State guidelines. Within the City of Perris, the Planning Department is responsible for the coordination of all local noise control activities.

PURPOSE

The purpose of the Noise Element is to serve as an official guide to the City Council, the Planning Commission, City departments, individual citizens, businessmen, and private organizations concerned with noise pollution within the City of Perris. The Noise

Element provides a reference to be used in connection with actions on various public and private development matters as required by law, and is utilized to establish uniformity of policy and direction within the City concerning actions to minimize or eliminate noise pollution and for making decisions regarding proposals which may have an impact on the City's environment.

The Noise Element includes definitions, objectives, policies, standards, criteria, programs, and maps which are to be considered when decisions are made affecting the noise environment within the City of Perris.

DEFINITIONS

The following common terms are used throughout the Noise Element:

Ambient Noise - The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

A-Weighted Sound Pressure Level, dB(A) - The sound pressure level, in decibels, as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear and gives good correlation with subjective reactions to noise.

Community Noise Equivalent Level (CNEL) - The average, equivalent A-weighted sound level during a 24-hour day obtained by adding five decibels to the hourly noise levels measured during the evening (from 7:00 p.m. to 10:00 p.m.) and by adding ten decibels to the hourly noise levels measured during the night (from 10:00 p.m. to 7:00 a.m.). In this way, CNEL takes into account the lower tolerance of people for noise during evening and nighttime periods.

Decibel (dB) - A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals.

Maximum Noise Level - The maximum instantaneous noise level that occurs during a specific time interval. In acoustics, the maximum sound pressure level is understood to be for single events unless some other kind of level is specified.

Noise - Annoying, harmful, or unwanted sound.

Noise Reduction - The ability of a material to reduce the noise level from one place to another or between one room and another. Noise reduction is specified in decibels.

Noise Contour - A line drawn about a noise source indicating constant levels of noise exposure. CNEL is the metric utilized herein to describe community exposure to noise.

Noise Impact Area - A specific area exposed to significant levels of noise.

Noise-Sensitive Land Uses - Noise-sensitive land uses include, but are not limited to, residences, schools, libraries, hospitals, churches, offices, hotels, motels, and outdoor recreational areas. These typify land uses where suitability is restricted by intrusive noises. Hence, they are termed "noise-sensitive". Noise-sensitivity factors include interference with speech communication, subjective judgement of noise acceptability and relative noisiness, need for freedom from noise intrusion, and sleep interference criteria. The Land Use Element of the General Plan provides a description of the residential areas throughout the City and is considered the source for the inventory of noise-sensitive areas.

Sound - As used herein, sound is a reaction in the ear caused by radiant energy being transmitted from a source by longitudinal pressure waves in air or some other elastic medium.

Sound Level Meter - A measurement instrument containing a microphone, an amplifier, an output meter, and one or more frequency weighting networks. It is used for the determination of sound levels.

GOALS STATEMENT

- o To establish the appropriate standards and the related technological base for the continuing enforcement of the City's noise control ordinance.
- o To provide sufficient information concerning the community noise environment so that noise may be effectively considered in the land use planning process.
- o To develop strategies for abatement of excessive noise exposures.
- o To protect those existing regions of the City for which noise environments are considered acceptable and those locations throughout the City which are considered "noise sensitive".
- o To establish the community noise environment (in the form of noise contours) for local compliance with the State mandated Noise Insulation Standards.
- o To encourage the reduction of noise from all sources such as motor vehicles, industrial/commercial activities, and residential activities which generate excessive and intrusive noise.
- o To promote increased public awareness concerning the effects of noise.
- o To provide methods by which the public may assist in reducing noise.

- o To ensure that the health and well-being of the citizens of Perris are not compromised by exposure to excessive and possibly harmful levels of noise.
- o To provide a quality environment in which the citizens of Perris may live and have assurance of continued health and well-being.

The sections that follow provide a discussion of the methods used to measure and analyze the noise environment of the City of Perris. The results of the analysis will then be compared with accepted standards to determine where the City is affected by adverse levels of noise. This will lead to a description of a policy and action program designed to minimize (or eliminate) these adverse levels and prevent future problems from occurring.

NOISE EVALUATION AND MEASUREMENT

A description of the character of a particular noise requires the following:

1. The amplitude and amplitude variation of the acoustical wave,
2. The frequency (pitch) content of the noise, and
3. The duration of the noise.

Definitions of the most commonly used terms encountered in community noise assessments and noise control have been provided as part of the Noise Element. Of these terms, the A-weighted sound pressure level (identified as dB{A}) is the scale of measurement which is most useful in community noise measurement. This sound level is measured in decibels to provide a scale with the range and characteristics most consistent with that of peoples' sensitivity to sounds.

The A-weighted sound level, its application to the CNEL measure of noise exposure, and its utility in the description of ambient noise levels are discussed in the remainder of this section.

A-Weighted Sound Level

To establish the A-weighted sound level, the acoustical signal is detected by the microphone and then filtered to weight those portions of the noise which are most annoying to individuals.

This weighting of sound energy corresponds approximately to the relative annoyance experienced by humans from noise at various frequencies. The sound levels of a few typical sources of noise which are routinely experienced by people within the City of Perris are listed in Figure 1.

The A-weighted sound level of traffic noise and other long-term noise producing activities within and around a community varies considerably with time. Measures of this varying noise level are accomplished by obtaining statistical samples. For the purposes of this study, the following statistical values have been used:

L_{90} - The near minimum sound level. This value is exceeded 90% of the time during the measurement period.

L_{50} - The central tendency of the sound level. This value is exceeded 50% of the time during the measurement period.

L_{10} - The near maximum sound level. This value is exceeded 10% of the time during the measurement period.

L_{eq} - The energy equivalent sound level. This value is most representative of the long-term annoyance potential as well as other effects of the noise.

These measures may be recorded so as to obtain representative samples of the noise during certain time periods (e.g., peak traffic period, morning, afternoon, night, etc.).

Community Noise Equivalent Level (CNEL)

It is recognized that a given level of noise may be more or less tolerable depending on the duration of exposure and the time of day during which the noise is experienced. There are several measures of noise exposure which consider not only the variation of noise level but also include temporal characteristics. Of these, the State Department of Aeronautics and the California Commission of Housing and Community Development have adopted the CNEL. This measure weights the average noise level for the evening hours (from 7:00 p.m. to 10:00 p.m.) by 5 dB, and the late evening and early morning hours (from 10:00 p.m. to 7:00 a.m.) by 10 dB. The unweighted daytime noise levels are combined with these weighted levels and averaged to obtain a CNEL value. Figure 2 indicates the outdoor CNEL at typical locations throughout the Southern California area.

Acceptable Exterior Noise Exposures - CNEL

Figure 3 indicates the CNEL considered acceptable for various land use categories. In general, exterior noise exposures at residential locations should not exceed a CNEL of 65 dB.

The Environmental Protection Agency (EPA) has recommended a policy stating that a CNEL of 55 dB not be exceeded within exterior living spaces. However, the EPA emphasizes that this level of exposure may not be economically feasible nor, in many cases, a practical level to achieve.

Acceptable Interior Noise Exposures - CNEL

California's noise insulation standards were officially adopted by the California Commission of Housing and Community Development in 1974 and became effective on August 22, 1974 (California Administrative Code, Title 25, Section 1092). The ruling states that "Interior community noise equivalent level (CNEL) with windows closed, attributable to exterior sources shall not exceed an annual CNEL of 45 dB in any habitable room." Additionally, the commission specifies that residential buildings or structures to be located within exterior CNEL contours of 60 dB or greater of an existing or adopted freeway, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source shall require an acoustical analysis showing that the building has been designed to limit intruding noise to an interior CNEL of 45 dB.

Annoyance and Health Considerations

In general, noise may affect the average individual in the following ways:

1. General hearing loss or damage. Sound levels which exceed 85 dB(A), when experienced for long durations during each working day, may result in severe temporary or even permanent hearing loss. State and federal safety and health regulations currently protect workers at levels of exposure which exceed 90 dB(A) for each 8-hour workday.

2. Interference with oral communication. Speech intelligibility is impaired when sound levels exceed 60 dB(A). The amount of interference increases with sound level and distance between speaker and listener.
3. Sleep interference. Sound levels which exceed 40 to 45 dB(A) are generally considered to be excessive for sleeping areas within a residence.
4. Contributes to nervousness and tension. Human response to frequent noises loud enough to startle or alarm has been linked to such chronic stress symptoms as low resistance, high blood pressure, exhaustion, and ulcers.

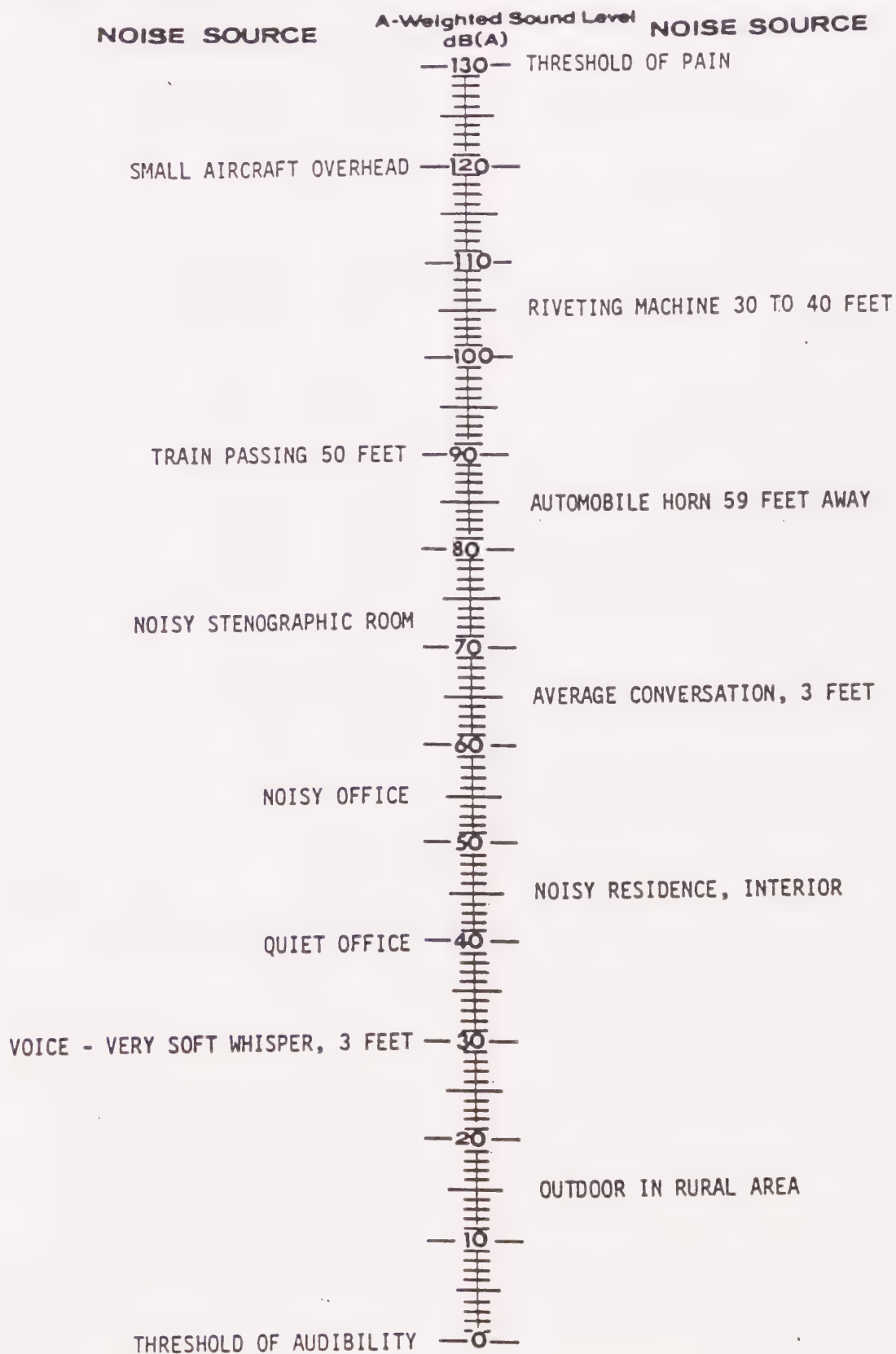
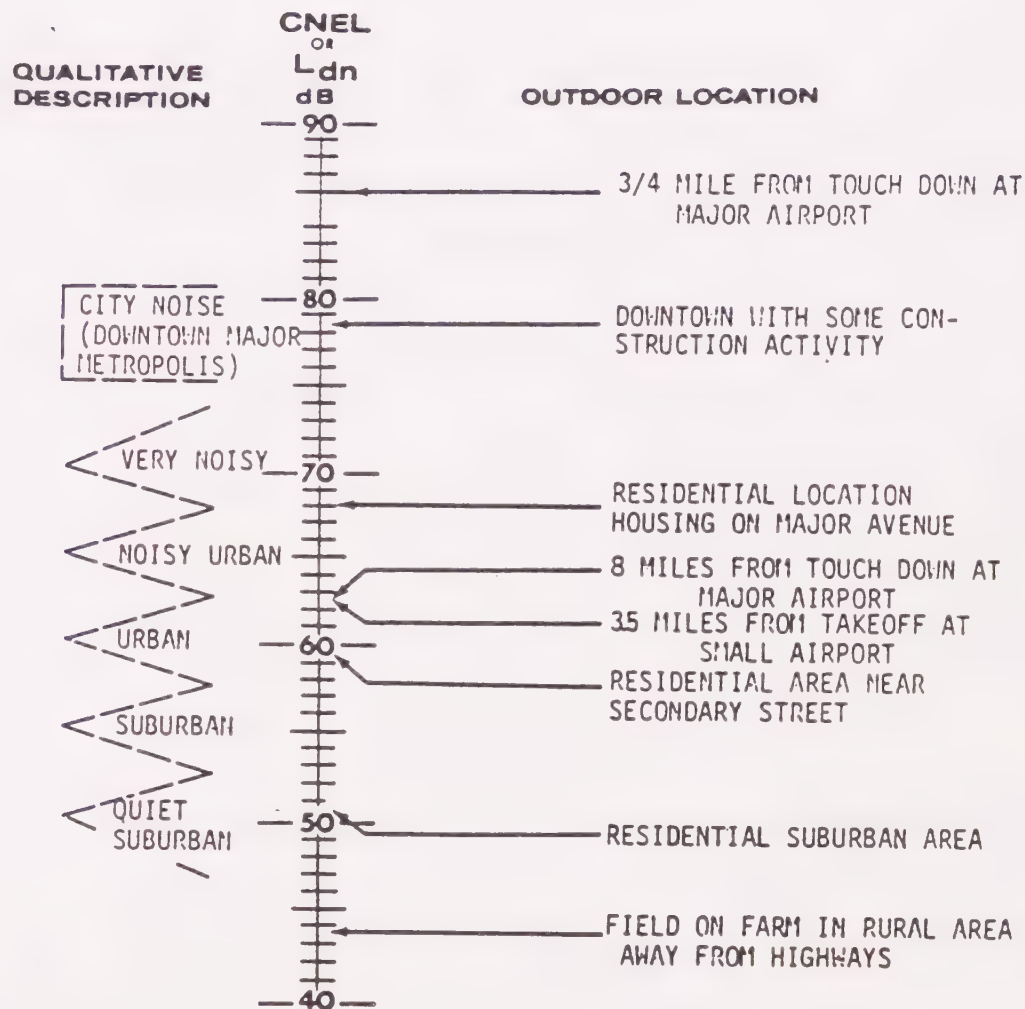
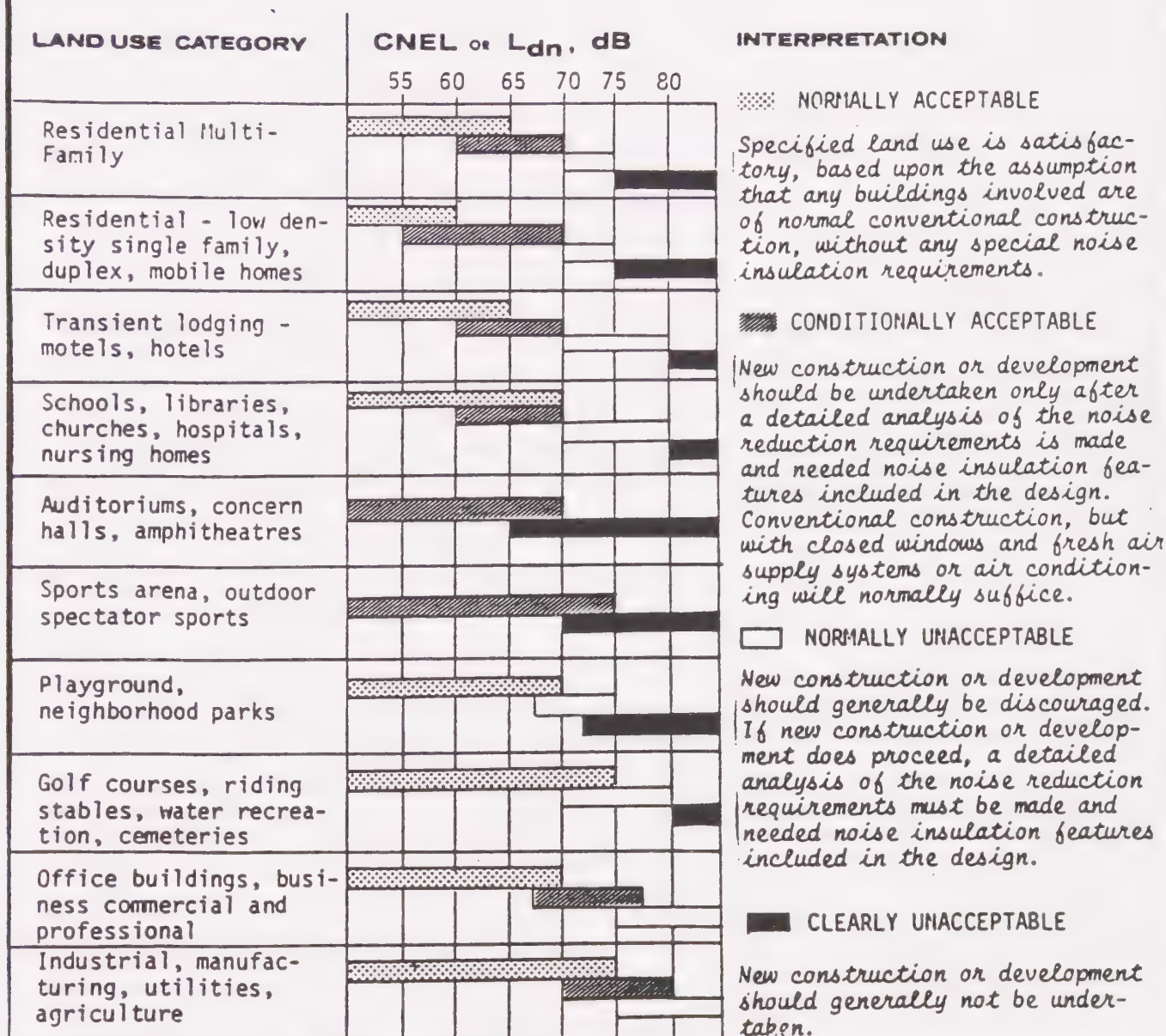


Figure 1. Representative Noise Sources and Sound Levels



SOURCE: In part taken from, "Information on Levels of Environmental Noise...", U.S. Environmental Protection Agency, 550/9-74-004, March 1974.

Figure 2. Outdoor Noise Exposures at Various Locations



SOURCE: In part taken from "Aircraft Noise Impact Planning Guidelines for Local Agencies", U.S. Dept. of Housing and Urban Development, TE/NA-472, November 1972.

Figure 3. Land Use Compatibility for Community Noise Environments

FINDINGS

The most significant noise producing activity within the City of Perris involves the transportation elements (arterials, freeways, rail lines, and aircraft flyovers). In addition, numerous fixed sources of noise exist within portions of the City. The following section provides a discussion of the noise measurements obtained and an inventory of noise sources within the City. From these measurements and complimenting analytical procedures, noise exposure contours have been derived for the City and noise impact areas have been identified.

Noise Survey Results

Various locations within the City of Perris were surveyed in September 1985 to establish the existing levels of noise. These measurement sites were selected to determine the impact on noise sensitive areas due to traffic on major arterials (including the Route I-215 highway). A total of thirty measurements were obtained, two of which were 24-hour samples. The measurement locations and the sound levels measured at each position are listed in Appendix IV and provide a definition of the overall noise environment of the City of Perris.

The following provides an inventory of noise sources measured within Perris and the ranges of maximum sound levels generated by these sources:

| <u>Noise Source</u> | <u>Range of Sound Levels</u> |
|--|------------------------------|
| Military Aircraft Flyover (Altitude 1000') | 63 to 90 dB(A) |
| Light Aircraft Flyover (Alt. 1000') | 52 to 62 dB(A) |
| Truck Leaving Plant on Private Property at 50' | 72 to 80 dB(A) |
| Trash Pickup at 100' | 75 to 95 dB(A) |
| Helicopter Flyover (Alt. 200') | 85 to 95 dB(A) |
| Truck on City Streets at 50' | 75 to 90 dB(A) |
| Cement Batch Plant at 50' | 72 to 85 dB(A) |
| Motorcycles at 50' | 65 to 90 dB(A) |
| Sports Cars at 50' | 65 to 85 dB(A) |
| Traffic on Main Arterials at 50' | 65 to 75 dB(A) |
| Traffic on Highway at 50' | 80 to 85 dB(A) |
| Construction Noise at 50' | Refer to Figure 4 |
| Train Horn Sound, Level vs. Distance | Refer to Figure 5 |
| Locomotive Passby at 50' | 84 to 86 dB(A) |

When the sound level of a noise is indicated, the distance from source to receiver must be stated.

These noise sources were measured at various locations throughout the City. Therefore, the sound levels are not necessarily indicative of any particular area or location.

Community Noise Equivalent Level (CNEL) Contours

CNEL contours have been derived for each of the noise producing transportation elements within Perris. The previously cited noise measurements and generally recognized analytical procedures have been used in the preparation of the CNEL contour maps (Figures 6 and 7). The CNEL contours have been prepared on City street maps using a scale of 1"=800'. The procedures used to derive these contours essentially rely on research studies

reported by the Federal Highway Administration (Reference 6). Contours are provided for CNEL values from 60 dB to 75 dB in 5 dB increments for the existing (Figure 6) and projected (Figure 7) environments within the City.

A significant portion of the noise experienced in the City is produced by traffic on the highways and the primary and secondary arterials. Each of the arterials within the City has been considered in the development of the CNEL contours. Also considered in the development of the contours were aircraft operations at Perris Valley Airport and March Air Force Base, as well as operations on the AT & SF rail line. For the purposes of this study, the Perris Valley Airport contours were developed using data supplied by the City and the rail line contours were developed using information provided by the AT & SF Railroad. Noise contours for March Air Force Base were obtained from the Air Installation Compatible Use Zone (AICUZ) report prepared for that facility (Reference 9). These contours were verified by independent measurements during a previous study.

Aircraft Noise Due to Operations at March Air Force Base

Flight operations at March Air Force Base produce a significant impact in the north and northeastern portions of the city. Because of the location of the flight tracks and the type of aircraft involved, there are few areas that are not affected by this activity. Figure 8 provides the CNEL contours for March Air Force Base.

During the months of September to November 1980, May 1982, and September 1985, a number of aircraft flyovers were measured at various locations throughout the city as part of a previous study

and as part of this study. The maximum sound levels measured at these locations ranged from 62 dB(A) to as high as 90 dB(A). Appendix IV provides a complete listing of the data.

According to the AICUZ report for March Air Force Base (Reference 9), there are approximately 138 takeoffs per day at the base, primarily involving KC-10 and KC-135 aircraft. Because March Air Force Base is part of the Strategic Air Command, it cannot be determined what level of flight activity will exist in the future or what types of aircraft will be used at the base. However, any future impact will be directly related to the number of operations occurring each day and the time of day at which they occur. A significant increase in operations, particularly nighttime operations, will have a detrimental effect on the quality of life within the city.

It is noted that the CNEL at some residential locations in the northern portions of the city ranges from 70 to 80 dB as a result of aircraft operations at March Air Force Base. This is greater than accepted standards and will compromise the welfare of citizens exposed to these levels for a long period of time.

Highway Traffic Noise

CNEL values at residential locations bordering the Route I-215 highway are in the range of 70 to 80 dB. The residences adjacent to the Route 74 highway are exposed to a CNEL of 65 to 75 dB. The range of levels at locations directly adjacent to Route I-215 is greater than is considered acceptable and will compromise the welfare of residents exposed for a long period of time.

Traffic Noise from Major and Secondary Arterials

The CNEL values at the residential locations directly adjacent to the following arterials exceeds 65 dB. Hence, the noise exposures at these residential locations are considered excessive:

| <u>Arterial</u> | <u>Reach</u> |
|---|---|
| "A" Street | Nuevo Road to Mapes Road (projected) |
| Citrus Avenue | Rt. I-215 to Murrieta Road |
| Ellis Avenue | Rt. 74 to Redlands Ave. (projected) |
| Ethanac Road | Rt. 74 to Rt. I-215 (projected) |
| Heacock Street | Oleander Ave. to Ramona Expressway (projected) |
| | Patterson Ave. to Ramona Expressway (projected) |
| Indian Avenue | N. of Nuevo Road (projected) |
| Navajo Road | San Jacinto Ave. to Indian Circle (projected) |
| Nuevo Road | Rt. I-215 to Pico (projected) |
| Oleander Avenue | Rt. I-215 to Murrieta Rd. (projected) |
| Perris Boulevard | Orange to Case Rd. (existing and projected) |
| Ramona Expressway | Rt. I-215 to Perris Boulevard (existing and projected) |
| Redlands Avenue | Ellis Avenue. to Ramona Expressway (projected) |
| Rider Street | Rt. I-215 to Ramona Expressway (projected) |
| Rt. I-215 East Frontage Rd. (proposed) | Oleander Interchange to Nuevo Road (projected) |

Aircraft Noise From Perris Valley Airport

At the current level of aircraft activity (about 50 operations per week), the impact of Perris Valley Airport flight operations is considered insignificant at existing residential locations throughout the City (see Figure 6).

Measurements of the noise levels generated by aircraft at the airport were obtained on July 31, 1982 at positions north and south of the runway. (See Appendix IV for the location of the measurement positions). At these positions the maximum noise level generated by an aircraft taking off was 80 to 85 dB(A). Landings produced lower levels of 52 to 74 dB(A).

Future activity at the airport is not expected to differ significantly from the current activity both in terms of the number of operations and the types of aircraft using the facility. However, any future impact will be directly related to the number of operations occurring each day and the time of day at which they occur. If lighting is installed at the airport, nighttime operations will have a detrimental effect on the quality of life within the City.

Noise From Train Movements On The AT & SF Rail Line

At the current level of activity, the impact of AT & SF rail line operations is considered insignificant at existing residential locations in the central portion of the City.

Currently, there are approximately two operations per day on the AT & SF rail line. This level of activity is not expected to increase significantly in the future. However, any future impact

will be directly related not only to the number of operations occurring each day, but also to the time of day at which they occur. A significant increase in nighttime operations will have a detrimental effect on the quality of life in Perris. The late night and early morning train passes are the primary annoyance to residents who live adjacent to the tracks.

Commercial/Industrial Noise

In general, commercial/industrial noise within the City of Perris is not considered excessive. However, where residential locations are adjacent to heavy industrial zones or trucking operations, a significant impact exists. This impact is primarily related to noise generated by loading dock operations, trucks entering and leaving the area, and mechanical equipment located both inside and outside the building(s).

Construction Activity

The impact of construction activity noise which occurs during the daytime is considered minimal for no more than two or three months of activity. However, late night and weekend disturbance caused by construction noise may cause a significant impact when experienced at nearby residential locations. Figure 4 provides a summary of typical noise levels generated by construction equipment.

Noise Sensitive Locations

In general, the sound levels of noise sensitive locations within the City are not considered excessive. However, the following areas are located within a 65 dB CNEL contour as identified on the maps of Figures 6, 7, and 8:

- Portions of Perris Lake High School (projected only)
- Portions of Perris Primary School
- Portions of Perris Union High School
- Sanders Elementary School
- Portions of Temple Christian School
- Portions of Val Verde School
- Perris General Hospital
- Medical Arts Convalescent Hospital
- Library
- Portions of Banta Beatty Park
- Portions of Russel Stewart Park

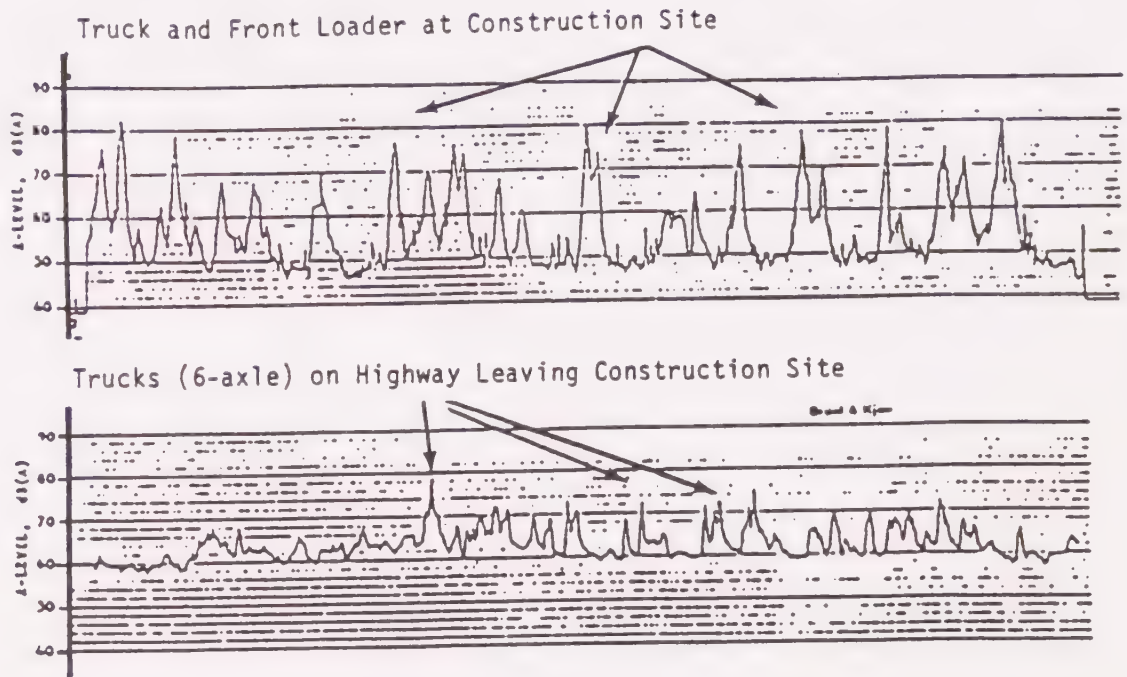
Table 1 provides an assessment of impact at each school relative to the State standard regarding classroom noise levels (Section 216 of the State of California Streets and Highways Code). This standard states that interior sound levels for schoolrooms adjacent to a freeway or State highway may not exceed an equivalent sound level Leq of 52 dB(A). It is also generally applied to other sources of noise which may intrude on schoolroom spaces such as busy arterials, rail lines, etc.

Table 1. Assessment of Impact at Schools Within the City of Perris Relative to State Standards

| <u>School</u> | <u>Assessment of Impact*</u> | |
|----------------------------------|---|---|
| | <u>Windows Open</u> | <u>Windows Closed</u> |
| Apostolic Christian School | Insignificant | Insignificant |
| Perris Primary School | May be significant near Route 74 | May be significant near Route 74 |
| Perris Lake High School | May be significant near Ellis (projected) | Insignificant |
| Perris Union High School | May be significant near Nuevo Road. Air- craft flyovers may generate significant noise levels | Aircraft flyovers may generate significant noise levels |
| Perris Valley Jr. High School | May be significant near Route I-215. Air- craft flyovers may generate significant noise levels | Aircraft flyovers may generate significant noise levels |
| Sanders Elementary School | Significant | May be significant |
| St. James School | Insignificant | Insignificant |
| Temple Christian School | Aircraft flyovers may generate significant noise levels | Aircraft flyovers may generate significant noise levels |
| Val Verde School | May be significant near Indian Avenue Aircraft flyovers may generate significant noise levels | Aircraft flyovers may generate significant noise levels |

* Assumes 10 dB(A) of noise reduction for standard construction with windows open and 15 dB(A) of noise reduction with windows closed.

CONSTRUCTION EQUIPMENT



CONSTRUCTION EQUIPMENT NOISE LEVELS
(measured at a distance of 50 feet)

| Equipment | Noise Level | Equipment | Noise Level |
|---------------------------|-------------|-------------------|-------------|
| Earthmoving | | Stationary | |
| front loader | 79 dB(A) | pump | 76 dB(A) |
| backhoe | 85 | generator | 76 |
| bulldozer | 80 | compressor | 81 |
| tractor | 80 | Impact | |
| scraper | 88 | pile driver | 101 |
| grader | 85 | jack hammer | 88 |
| truck | 91 | rock drill | 98 |
| paver | 89 | pneumatic tools | 86 |
| Materials Handling | | Other | |
| concrete mixer | 85 | saw | 78 |
| concrete pump | 82 | vibrator | 76 |
| crane | 83 | | |
| derrick | 88 | | |

Figure 4. Construction Equipment Noise Levels

TRAIN AND HORN SOUNDING LEVELS

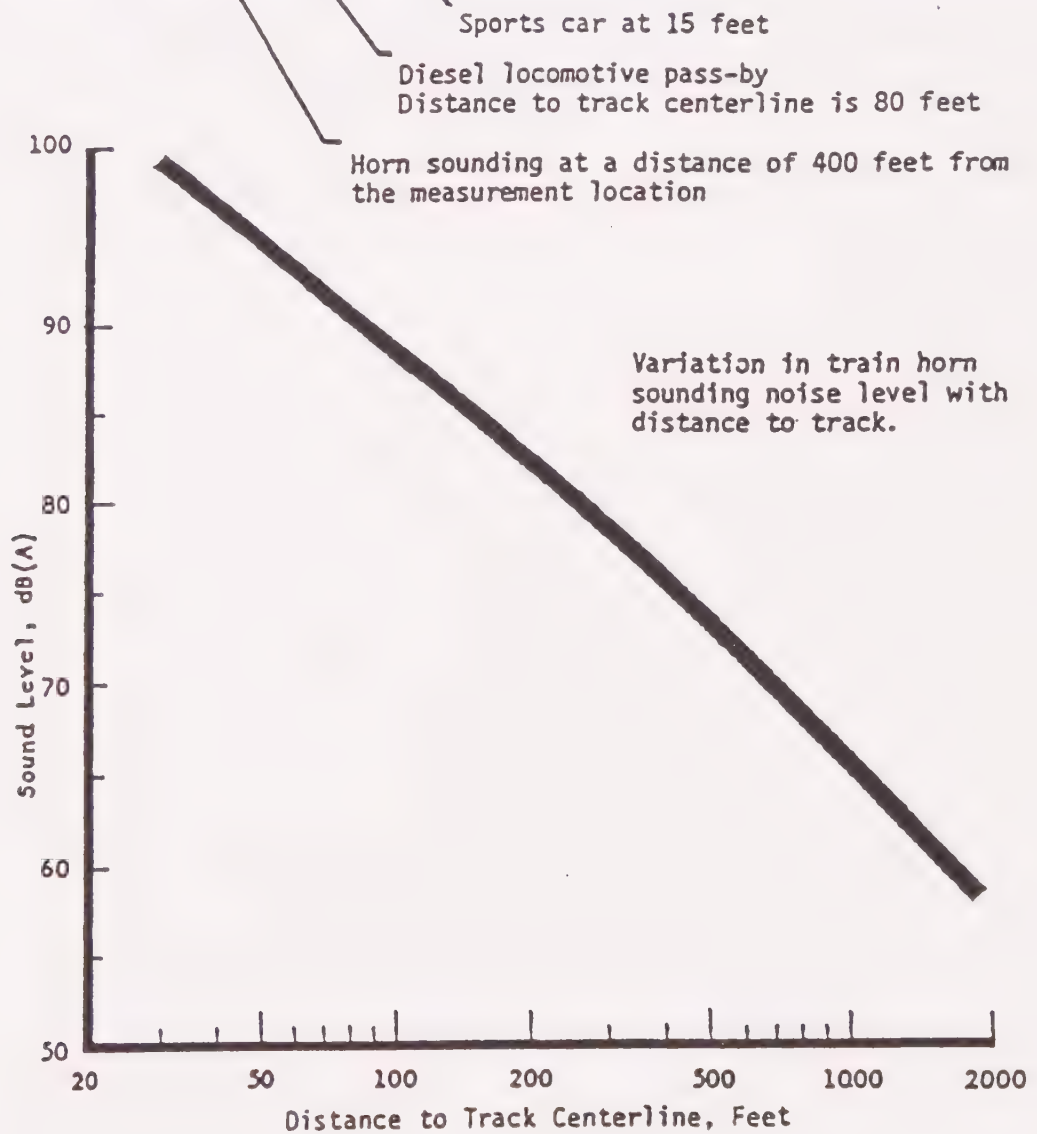
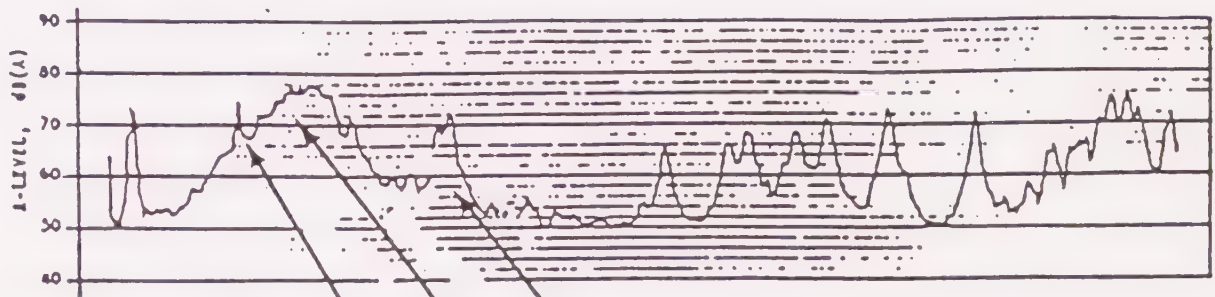


Figure 5.

Refer to 800 scale maps at the
Department of Planning and Community Development
for detailed noise contours

Figure 6. Existing CNEL Noise Contours

Refer to 800 scale maps at the
Department of Planning and Community Development
for detailed noise contours

Figure 7. Projected (2000) CNEL Noise Contours



Figure 8. CNEL Noise Contours
for March Air Force
Base

Source: Reference 9

NOTE: Shading indicates
noise impact areas
(CNEL greater than
65 dB).

PROBLEM SUMMARY

In the City of Perris there are six major sources of noise:

1. Operations at March Air Force Base
2. Traffic on the Route I-215 and Route 74 Highways
3. Traffic on the major arterials within the city
4. Rail traffic on the AT & SF rail line
5. Operations at Perris Valley Airport, and
6. Commercial/industrial activities adjacent to residential locations.

Of these, the most serious problems are the noise levels produced by operations at March Air Force Base and by traffic on the Route I-215 highway. A CNEL of 70 to 80 dB exists at some residential locations as a result of these sources. This compromises the welfare of citizens in these areas and should be corrected.

The Noise Element has identified a number of noise related problems and issues within the City. The Policy Program consists of policies and implementation techniques which minimize these problems and issues. Short-term possibilities for noise reduction in Perris consist mostly of the enforcement of noise control guidelines and the appropriate placement of walls and berms to buffer residential and other noise-sensitive areas from traffic noise. Long-term possibilities for noise reduction will be contingent upon future development, especially along major traffic routes, and in the vicinity of the AT & SF railroad and the two air facilities. Planning now can help to minimize the future impact of noise on the community.

POLICY PROGRAM

POLICY 1 - THE CITY WILL DISCOURAGE THE FUTURE EXPANSION OF FACILITIES OR INTENSIFICATION OF OPERATIONS WITHIN MARCH AIR FORCE BASE AND THE PERRIS VALLEY AIRPORT WHICH WOULD HAVE DETRIMENTAL IMPACTS ON THE PEACE, HEALTH, AND SAFETY OF CITY RESIDENTS. THE CITY WILL ALSO ENCOURAGE THE IMPLEMENTATION OF NOISE CONTROL PROCEDURES BY THE FACILITIES AND WILL CONSIDER METHODS BY WHICH NOISE EXPOSURE DUE TO AIRCRAFT MAY BE MINIMIZED WITHIN THE CITY.

Action - The City will monitor the number of existing operations at March Air Force Base and Perris Valley Airport and any plans for future development. Any actions that increase the level of noise throughout the City will be discouraged. This includes increased flight operations (particularly nighttime operations) and flight paths that pass over the City.

Responsibility - Planning Department

POLICY 2 - A NOISE BARRIER SHOULD BE CONSTRUCTED ALONG THE ROUTE I-215 HIGHWAY WHERE A SIGNIFICANT IMPACT EXISTS AT ADJACENT RESIDENTIAL LOCATIONS SUBJECT TO THE AVAILABILITY OF ADEQUATE FINANCIAL RESOURCES MADE AVAILABLE BY CALTRANS AND THE CITY OF PERRIS IN THE FUTURE. APPROVAL OF PROPOSED NEW RESIDENTIAL CONSTRUCTION WITHIN THESE IMPACT AREAS SHALL BE CONDITIONED UPON PROVISION OF ADEQUATE NOISE MITIGATING STRUCTURES BY THE DEVELOPER, IN CONFORMANCE WITH THE REQUIREMENT OF CALTRANS AND THE CITY OF PERRIS.

Action - The City will actively participate in the legislative process leading to a viable means of financing the construction of a noise barrier along the highway.

Discussion - Residential locations directly adjacent to the highway are exposed to traffic noise in the range of 80 to 90 dB(A) during portions of the day. Noise barrier heights of from 10 to 12 feet are needed at these locations to reduce the noise to acceptable levels. Construction of a sound barrier, to be effective and economically feasible, must be as close as possible to the near lane of traffic. This requires the actual construction of the barrier on the highway right-of-way which is under state jurisdiction. Such construction requires the approval of, cooperation of, and coordination with the State Department of Transportation, as well as the availability of financial resources outside of the City of Perris' normal operating budget.

Responsibility - Planning Department in cooperation with the California Department of Transportation.

POLICY 3 - THE CITY WILL ENCOURAGE THE AT & SF RAILROAD TO REDUCE THE LEVEL OF NOISE PRODUCED BY TRAIN MOVEMENTS WITHIN THE CITY.

Action - The City will encourage the AT & SF Railroad to minimize the level of noise produced by existing train movements. This can be accomplished by regular maintenance of the track and trains. Use of the trains' horns should also be minimized. The City will also monitor the existing operations on the rail line as well as any plans for future development. Any actions that increase the level of noise throughout the City will be discouraged.

Responsibility - Planning Department in cooperation with the AT & SF Railroad.

POLICY 4 - THE CITY WILL CONSIDER PLANNING GUIDELINES WHICH INCLUDE NOISE CONTROL FOR THE EXTERIOR LIVING SPACE OF ALL NEW RESIDENTIAL DEVELOPMENTS WITHIN EXTREME NOISE IMPACT AREAS.

Action - The City will adopt guidelines which consider noise as an early factor in planning future residential developments, including mobile home parks.

Discussion - Portions of the City are significantly affected by noise as shown in the noise contour maps of Figures 6, 7, and 8. The more affected areas include the Route I-215 highway corridor, the Route 74 corridor, and the March Air Force Base flight corridors.

An acoustical analysis should be required for new residential developments within the projected year 2000 60 dB CNEL contour of highways, secondary arterials, airfields, and rail lines affecting the City. This analysis should indicate the existing and projected CNELs on the site and the method(s) by which the noise is to be controlled or reduced to no more than 70 dB within the exterior living space of the project. Although residential projects within the 70 dB contour or higher should be strongly discouraged, under special circumstances their approval may be conditioned upon the feasibility of reducing exterior noise levels to no more than 75 dB.

Noise should be considered early in the development of new residential or noise-sensitive construction, including mobile home parks. The location and orientation of the residential buildings may be configured to minimize or eliminate a noise problem for a site adjacent to the major highways, arterials, or rail lines. Other effective noise reduction tools include the use of earthen berms, sound reducing walls, and generous setbacks from noise sources.

Responsibility - Planning Department

POLICY 5 - THE CITY WILL CONSIDER PLANNING GUIDELINES WHICH INCLUDE NOISE CONTROL FOR THE INTERIOR LIVING SPACE OF ALL NEW RESIDENTIAL DEVELOPMENTS WITHIN NOISE IMPACT AREAS.

Action - The City will require that the State Noise Insulation Standards for exterior-to-interior noise control be applied to all new single- and multifamily structures.

Discussion - As stated earlier in the Noise Element, these standards were adopted by the State in 1974. They apply to all new multifamily dwelling units (apartments, condominiums, motels, etc.). The exterior-to-interior noise control requirements of the Standards should be applied to all new single family as well as multifamily structures.

The residential design should be such that the interior living spaces are exposed to a CNEL of no more than 45 dB. This may be accomplished by:

1. A reduction of the exterior noise to which the dwelling is exposed,
2. Installing sound rated windows suitable for the noise reduction required,
3. Configuring and insulating exterior walls and roofing systems to reduce the interior noise to acceptable levels,
4. Locating (or eliminating) vents, mail slots, etc., to minimize sound propagation into the home, and
5. Installing forced air ventilation as needed to provide a habitable living space if the interior CNEL is to be met with all or some windows closed.

Responsibility - Planning Department and the Department of Building Safety.

POLICY 6 - THE CITY WILL APPLY NOISE INSULATION REQUIREMENTS FOR
THE CONVERSION OF EXISTING APARTMENTS INTO CONDOMINIUMS

Action - The City will adopt the State Noise Insulation Standards to limit intrusive noise levels for all new condominium conversion projects within the City.

Discussion - As stated earlier in the Noise Element, the State Noise Insulation Standards apply to all new multifamily dwelling units. The City should also consider applying these standards to all new projects that involve the conversion of existing apart-

ments into condominiums. These standards limit intrusive noise by setting minimum ratings for the sound transmission of party walls and floor/ceiling separations between units.

In addition, the Noise Insulation Standards specify a maximum interior noise exposure of 45 dB CNEL. This level may be accomplished as indicated in Policy 5. As stated in the Noise Insulation standards, an analysis should be required for conversion projects within the 60 dB contour of highways, secondary arterials, airfields, and rail lines that affect a community. This analysis should indicate the existing and projected CNELs on the site and the method(s) by which the noise is to be controlled or reduced so that the CNEL of the interior living spaces of the project do not exceed 45 dB.

Responsibility - Planning Department

POLICY 7 - THE CITY WILL CONSIDER NOISE CONTROL REQUIREMENTS FOR ALL NEW EQUIPMENT PURCHASES

Action - Noise levels produced by equipment will be considered a factor in the procurement process.

Discussion - Various City departments may be involved in the procurement of noise producing equipment such as compressors, air conditioners, and other fixed and mobile machinery. These types of operating equipment may be purchased with the recommended noise abating equipment installed.

Responsibility - Finance Department

POLICY 8 - FUTURE PROJECTS WITHIN THE CITY WILL REFLECT A CONSCIOUSNESS ON THE PART OF THE CITY REGARDING THE REDUCTION OF UNNECESSARY NOISE NEAR NOISE-SENSITIVE AREAS SUCH AS PARKS, HOSPITALS, LIBRARIES, CONVALESCENT HOMES, ETC.

Action - 1. Maintain liaison with transportation agencies such as CalTrans regarding the reduction of noise from existing facilities. The design and location of new facilities will also be considered.

2. Consideration should be given to buffering noise-sensitive areas from noise generating land uses.

3. Noise monitoring within the City will be an ongoing process conducted by the appropriate departments. Additionally, a liaison will be developed between the City and the Riverside County Health Department in order to obtain assistance in on-site measurements of noise levels.

4. Close attention should be paid to the noise evaluation in environmental impact statements.

Discussion - To reduce the level of noise in residential areas, the Circulation Element of the General Plan should be revised, wherever possible, to divert through traffic away from these areas.

As the existing and projected noise contours developed for the Noise Element indicate, traffic is a major source of noise in the City. However, these contours should not be considered adequate for specific site evaluations. Environmental impact reports with

satisfactory noise assessments have the additional value of helping to monitor localized noise conditions. The environmental impact issues should include:

1. Annoyance - Excessive noise is socially disruptive and may be physically and psychologically damaging.
2. Economics - Excessive noise adversely affects property values and levels of productivity. In the past, the costs of excessive noise from transportation facilities have been passed on to those in the vicinity rather than be borne by the producer of the noise.

Responsibility - Planning Department

POLICY 9 - THE CITY WILL IMPLEMENT A REVIEW PROCESS CONCERNING ITS POLICIES AND REGULATIONS AFFECTING NOISE.

Action - A review of ongoing policies and ordinances will be developed every five (5) years or as new technological developments warrant as per state guideline requirements.

Responsibility - Planning Department

POLICY 10 - THE CITY WILL ENCOURAGE ITS AGENCIES TO OBSERVE THE STATE AND FEDERAL OCCUPATIONAL SAFETY AND HEALTH NOISE STANDARDS

Action - The City will encourage the enforcement of all State and Federal safety and health regulations.

Discussion - These occupational standards range from the use of ear protectors for operators of equipment to the control and use of equipment within the City's jurisdiction. They stem from both State and Federal guidelines concerning occupational and community safety and health and should be included in the City's employment manual.

Responsibility - Planning Department

POLICY 11 - THE CITY WILL ENCOURAGE THE ENFORCEMENT OF REGULATIONS (SUCH AS THE STATE VEHICLE CODE NOISE STANDARDS) FOR ALL PRIVATELY OWNED, CITY OWNED, AND CITY OPERATED AUTOMOBILES, TRUCKS, AND MOTORCYCLES OPERATING WITHIN PERRIS.

Action - The City will encourage all law enforcement agencies operating within the City limits to enforce the State Vehicle Code noise standards. In addition, the City will explore possible noise control measures which can be implemented in the operation of its trash collection service.

Discussion - In general, the control of noise is most effectively accomplished by reduction of emissions from the source. However, one of the dominant sources of noise within the City (motor vehicles) is under the jurisdiction of the State. Furthermore, the reduction of noise from this source by the use of barriers is very expensive and often difficult to achieve. The State now has a noise regulation as part of the Vehicle Code. The City should encourage its enforcement, particularly along the highways.

Responsibility - Perris Police Department and the California Highway Patrol, and the City Finance and Utilities Department.

APPENDICES

- I. References
- II. Effects of Noise on People
- III. Traffic Analysis and Community Noise Equivalent Level (CNEL) Data for Major and Secondary Arterials
- IV. Noise Measurement Sites and Analysis of the Data

APPENDIX I

References

1. T. J. Schultz, "Noise Assessment Guidelines - Technical Background", U.S. Department of Housing and Urban Development, Report No. TE/TN 172, 1971.
2. "A Study of the Magnitude of Transportation Noise Generation and Potential Abatement", U.S. Department of Transportation (a set of seven reports), 1970.
3. "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances", U.S. Environmental Protection Agency, Report P.B. 206 717 (National Technical Information Service No. NTIS 300.1), 1971.
4. "Industrial Noise Manual", American Industrial Hygiene Association (14125 Prevost Street, Detroit, Michigan 48227), 1966.
5. "Noise Control in Multifamily Dwellings", U.S. Department of Housing and Urban Development (supercedes FHA No. 750), 1963.
6. "Highway Noise", U.S. Department of Transportation, Federal Highway Administration, FHWA-RD-77-108, FHWA Highway Traffic Noise Prediction Model, December 1978.
7. "Aircraft Noise Impact Planning Guidelines for Local Agencies", U.S. Department of Housing and Urban Development, TE/NA 472, November 1972.

8. "Information on Levels of Equipment Noise Requisite to Protect Public Health and Welfare within an Adequate Margin of Safety", U.S. Environmental Protection Agency, March 1974.
9. "Air Installation Compatible Use Zone Report, March Air Force Base, California," prepared by the United States Air Force, August 1983.

APPENDIX II

Effects of Noise on People

Whether a sound is a noise or not will depend on the source of the sound, the loudness relative to the background noise, the time of day, the situation, and the listener. The difference in our reactions is explained by the perceived noisiness, or how undesirable the sound is. An unwanted sound may be extremely irritating though it is not unreasonably loud. Recent studies have documented more serious effects of noise than annoyance; among them are slow, permanent hearing loss and physical and psychological stress.

While permanent deafness is sometimes caused by a single, very loud noise, most noise-induced hearing loss research has been done in the field of industrial noise and "hard rock" music where there is a widespread, periodic exposure to high levels of sound. Two main findings have come out of these studies. First, though the human ear registers a hearing loss after a few hours of exposure to loud noise, its flexibility is such that normal hearing may be completely regained after several hours of rest. Second, constant noise with no rest or frequent exposure to high noise levels over a period of several years will destroy the ability of the ear to recover its normal hearing. What this means is that infrequent exposure to loud noises can actually be less harmful than continuous exposure to a lower, constant noise level. Furthermore, the damage caused by, say, exposure to loud industrial noise during an 8-hour day will be covered by the Federal Workers' Compensation Act, while that caused by exposure to freeway noise over a 24-hour day receives no compensation at all.

Appendix II, continued.

Noise is also a contributing factor in medical stress. While the ability to respond quickly to messages can be beneficial to self-preservation, unnecessary arousal by irrelevant noises can interfere with efficiency, train of thought, and peace of mind. Human responses to frequent noises loud enough to startle or alarm have been linked to such chronic stress symptoms as low resistance, high blood pressure, exhaustion, and ulcers.

Speech interference has been a criterion for a great deal of noise research. Background noise interference naturally contributes to the misunderstanding of spoken communications when one word or more out of a sentence is masked by noise. It can reduce learning in the classroom and job efficiency at the office by forcing voices to be raised. Social psychologists say it may be a large factor in interpersonal friction or arguments. A high degree of speech interference may be accompanied by social disruption and a downgrading of the quality of life.

A consequence of even relatively low noise levels is sleep interference -- people being awakened or kept awake by noise. A high percentage of community complaints against noise generators stem from sleep interference. Steady, droning noise tends to be less disturbing than fluctuating noise levels. Sleep studies have linked interrupted rest to personality change and physiological deterioration.

As a matter of public health as much as community preference, noise pollution must be controlled. The latest findings of physical and emotional effects have mobilized many state and county health departments to strongly recommend a clampdown on

Appendix II, continued.

noise levels. The areas most vulnerable to the harmful effects of sound seem to be residential communities, particularly at night, but all human activities can be adversely affected by noise.

The effect of noise on real estate values has not been as systematically explored as has been the effect of noise on humans. Federal findings indicate that high noise levels will bring down the economic quality and value of homes, stores, and offices. This conclusion has led to the U.S. Department of Housing and Urban Development's (HUD) directive to withhold funding from projects that do not comply with acceptable noise standards. HUD's concern is divided between adverse effects on humans and economic losses. HUD, therefore, encourages the control of noise sources as well as the control of land use patterns for housing and other municipal needs, thus separating uncontrollable noise sources from residential and other noise-sensitive areas.

APPENDIX III

Traffic Analysis and Community Noise Equivalent Level (CNEL) Data for Major and Secondary Arterials

Table III-1. Distances to Existing and Projected CNEL Contour Lines, City of Perris

| | AVE. DAILY TRAFFIC | | CNEL @ 50' | | DISTANCE TO CONTOURS, 1985 | | | | | DISTANCE TO CONTOURS, 2000 | | | | |
|------------------------------|--------------------|--------|------------|------|----------------------------|------|------|------|------|----------------------------|------|------|------|------|
| | 1985 | 2000 | 1985 | 2000 | 60dB | 65dB | 70dB | 75dB | 80dB | 60dB | 65dB | 70dB | 75dB | 80dB |
| <u>"A" STREET</u> | | | | | | | | | | | | | | |
| Rt. 74 to Nuevo Rd. | 5,000 | 15,000 | 64.0 | 68.0 | 110 | --- | --- | --- | --- | 215 | 90 | --- | --- | --- |
| 4th St. to Mapes Rd. | 1,000 | 12,000 | 60.0 | 67.0 | 50 | --- | --- | --- | --- | 185 | 75 | --- | --- | --- |
| <u>CITRUS AVENUE</u> | | | | | | | | | | | | | | |
| Rt. I-215 to Perris Blvd. | --- | 10,000 | --- | 66.5 | --- | --- | --- | --- | --- | 170 | 69 | --- | --- | --- |
| Perris Blvd. to Murrieta Rd. | 1,900 | 8,000 | 61.5 | 66.0 | 69 | --- | --- | --- | --- | 155 | 62 | --- | --- | --- |
| Murrieta Rd. to Foothill | 64 | 6,000 | --- | 64.5 | --- | --- | --- | --- | --- | 120 | --- | --- | --- | --- |
| <u>"D" STREET</u> | | | | | | | | | | | | | | |
| Rt. I-215 to 1st St. | 6,900 | 10,000 | 65.5 | 66.5 | 143 | 56 | --- | --- | --- | 170 | 69 | --- | --- | --- |
| 1st St. to Rt. 74 | 8,600 | 10,600 | 66.0 | 66.5 | 155 | 62 | --- | --- | --- | 170 | 69 | --- | --- | --- |
| Rt. 74 to 8th St. | 5,400 | 8,000 | 64.5 | 66.0 | 120 | --- | --- | --- | --- | 155 | 62 | --- | --- | --- |
| 8th St. to 11th St. | 2,900 | 4,200 | 62.5 | 64.0 | 83 | --- | --- | --- | --- | 110 | --- | --- | --- | --- |
| <u>ELLIS AVENUE</u> | | | | | | | | | | | | | | |
| Rt. 74 to Perris Blvd. | --- | 18,000 | --- | 68.5 | --- | --- | --- | --- | --- | 235 | 100 | --- | --- | --- |
| Perris Blvd. to Redlands | --- | 16,000 | --- | 68.0 | --- | --- | --- | --- | --- | 215 | 90 | --- | --- | --- |
| <u>ETHANAC ROAD</u> | | | | | | | | | | | | | | |
| Rt. 74 to Goetz Rd. | --- | 20,000 | --- | 69.0 | --- | --- | --- | --- | --- | 255 | 110 | --- | --- | --- |
| Goetz Rd. to Rt. I-215 | 900 | 24,000 | --- | 70.0 | --- | --- | --- | --- | --- | 300 | 130 | 50 | --- | --- |
| <u>HEACOCK STREET</u> | | | | | | | | | | | | | | |
| Oleander Ave. to Ramona | 64 | 25,000 | --- | 70.0 | --- | --- | --- | --- | --- | 300 | 130 | 50 | --- | --- |
| Patterson Ave. to Ramona | 60 | 15,000 | --- | 68.0 | --- | --- | --- | --- | --- | 215 | 90 | --- | --- | --- |
| <u>INDIAN AVENUE</u> | | | | | | | | | | | | | | |
| N. of Nuevo Rd. | 88 | 8,000 | --- | 66.0 | --- | --- | --- | --- | --- | 155 | 62 | --- | --- | --- |
| <u>MAPES ROAD</u> | | | | | | | | | | | | | | |
| Rt. 74 to Patterson | 300 | 4,000 | --- | 63.5 | --- | --- | --- | --- | --- | 100 | --- | --- | --- | --- |
| Patterson to Goetz Rd. | 500 | 6,000 | --- | 64.5 | --- | --- | --- | --- | --- | 120 | --- | --- | --- | --- |

Table III-1. continued

| | AVE. DAILY TRAFFIC | | CNEL @ 50' | | DISTANCE TO CONTOURS, 1985 | | | | | DISTANCE TO CONTOURS, 2000 | | | | |
|------------------------------|--------------------|--------|------------|------|----------------------------|------|------|------|------|----------------------------|------|------|------|------|
| | 1985 | 2000 | 1985 | 2000 | 60dB | 65dB | 70dB | 75dB | 80dB | 60dB | 65dB | 70dB | 75dB | 80dB |
| NTAIN AVENUE | | | | | | | | | | | | | | |
| 74 to "A" St. | 750 | 5,000 | --- | 64.0 | --- | --- | --- | --- | --- | 110 | --- | --- | --- | --- |
| ALJO ROAD | | | | | | | | | | | | | | |
| Jacinto to Indian Cir. | 5,100 | 10,000 | 64.0 | 66.5 | 110 | --- | --- | --- | --- | 170 | 69 | --- | --- | --- |
| ROAD | | | | | | | | | | | | | | |
| -215 to Perris Blvd. | 4,200 | 15,000 | 64.0 | 68.0 | 110 | --- | --- | --- | --- | 215 | 90 | --- | --- | --- |
| Blvd. to Wilson Ave. | 5,100 | 20,000 | 64.0 | 69.0 | 110 | --- | --- | --- | --- | 255 | 110 | --- | --- | --- |
| San Ave. to Dunlap Dr. | 4,900 | 12,000 | 64.0 | 67.0 | 110 | --- | --- | --- | --- | 185 | 75 | --- | --- | --- |
| Up Dr. to Pico | 3,700 | 8,000 | 63.5 | 66.0 | 100 | --- | --- | --- | --- | 155 | 62 | --- | --- | --- |
| NDER AVENUE | | | | | | | | | | | | | | |
| I-215 to Perris Blvd. | 58 | 20,000 | --- | 69.0 | --- | --- | --- | --- | --- | 255 | 110 | --- | --- | --- |
| Perris Blvd. to Murrieta Rd. | --- | 15,000 | --- | 68.0 | --- | --- | --- | --- | --- | 215 | 90 | --- | --- | --- |
| NGE AVENUE | | | | | | | | | | | | | | |
| E. of Perris Blvd. | 1,300 | 5,200 | 60.0 | 64.0 | 50 | --- | --- | --- | --- | 110 | --- | --- | --- | --- |
| of Perris Blvd. | 700 | 5,900 | --- | 64.5 | --- | --- | --- | --- | --- | 120 | --- | --- | --- | --- |
| of Dunlap | 300 | 2,000 | --- | 61.5 | --- | --- | --- | --- | --- | 69 | --- | --- | --- | --- |
| OMAR-PICO ROAD | | | | | | | | | | | | | | |
| Nuevo Rd. to San Jacinto | 1,600 | 5,000 | 61.0 | 64.0 | 62 | --- | --- | --- | --- | 110 | --- | --- | --- | --- |
| San Jacinto to Santa Rosa | 2,400 | 4,000 | 62.0 | 63.5 | 75 | --- | --- | --- | --- | 100 | --- | --- | --- | --- |
| PERRIS BOULEVARD | | | | | | | | | | | | | | |
| W. of Orange | 6,100 | 12,600 | 65.0 | 67.0 | 130 | 50 | --- | --- | --- | 185 | 75 | --- | --- | --- |
| Orange to Nuevo | 6,400 | 13,000 | 65.0 | 67.5 | 130 | 50 | --- | --- | --- | 200 | 83 | --- | --- | --- |
| Nuevo to San Jacinto Ave. | 7,200 | 13,700 | 65.5 | 67.5 | 143 | 56 | --- | --- | --- | 200 | 83 | --- | --- | --- |
| San Jacinto Ave. to Case Rd. | 7,000 | 8,700 | 65.0 | 66.0 | 130 | 50 | --- | --- | --- | 155 | 62 | --- | --- | --- |
| RAMONA EXPRESSWAY | | | | | | | | | | | | | | |
| E. of Rt. I-215 and Cajalco | 6,800 | 40,000 | 65.5 | 72.0 | 143 | 56 | --- | --- | --- | 395 | 185 | 75 | --- | --- |
| E. of Perris Blvd. | 7,100 | 35,000 | 65.5 | 71.5 | 143 | 56 | --- | --- | --- | 368 | 170 | 69 | --- | --- |

Table III-1. continued

| | AVE. DAILY TRAFFIC | | CNEL @ 50' | | DISTANCE TO CONTOURS, 1985 | | | | | DISTANCE TO CONTOURS, 2000 | | | | |
|--------------------------------|--------------------|--------|------------|------|----------------------------|------|------|------|------|----------------------------|------|------|------|------|
| | 1985 | 2000 | 1985 | 2000 | 60dB | 65dB | 70dB | 75dB | 80dB | 60dB | 65dB | 70dB | 75dB | 80dB |
| <u>REDLANDS AVENUE</u> | | | | | | | | | | | | | | |
| Oleander Ave. to Ramona | --- | 6,000 | --- | 64.5 | --- | --- | --- | --- | --- | 120 | --- | --- | --- | --- |
| Ramona to Rider St. | 2,000 | 8,000 | 61.5 | 66.0 | 69 | --- | --- | --- | --- | 155 | 62 | --- | --- | --- |
| Orange Ave. to Nuevo Rd. | 70 | 13,000 | --- | 67.5 | --- | --- | --- | --- | --- | 200 | 83 | --- | --- | --- |
| Nuevo Rd. to San Jacinto | 60 | 16,000 | --- | 68.0 | --- | --- | --- | --- | --- | 215 | 90 | --- | --- | --- |
| San Jacinto Ave. to Ellis | --- | 16,000 | --- | 68.0 | --- | --- | --- | --- | --- | 215 | 90 | --- | --- | --- |
| <u>RIDER STREET</u> | | | | | | | | | | | | | | |
| Rt. I-215 to Perris Blvd. | 650 | 10,000 | --- | 66.5 | --- | --- | --- | --- | --- | 170 | 69 | --- | --- | --- |
| Perris Blvd. to Evans Rd. | 200 | 8,200 | --- | 66.0 | --- | --- | --- | --- | --- | 155 | 62 | --- | --- | --- |
| Evans Rd. to Ramona | 150 | 7,000 | --- | 65.0 | --- | --- | --- | --- | --- | 130 | 50 | --- | --- | --- |
| <u>ROUTE 74 (4TH STREET)</u> | | | | | | | | | | | | | | |
| 7th St. to "D" St. | 20,600 | 28,000 | 69.0 | 70.5 | 255 | 110 | --- | --- | --- | 320 | 143 | 56 | --- | --- |
| "D" St. to Perris Blvd. | 31,500 | 38,000 | 71.0 | 72.0 | 340 | 155 | 62 | --- | --- | 395 | 185 | 75 | --- | --- |
| Perris Blvd. to Rt. I-215 | 22,600 | 30,000 | 69.5 | 71.0 | 278 | 120 | --- | --- | --- | 340 | 155 | 62 | --- | --- |
| <u>ROUTE I-215</u> | | | | | | | | | | | | | | |
| Ethanac Rd. to Rt. 74 | 17,900 | 40,000 | 72.0 | 76.0 | 395 | 185 | 75 | --- | --- | 680 | 340 | 155 | 62 | --- |
| Case Rd. Interchange | 24,000 | 45,000 | 73.5 | 76.5 | 490 | 235 | 100 | --- | --- | 720 | 368 | 170 | 69 | --- |
| 4th St. to "D" St. | 21,800 | 45,000 | 73.0 | 76.5 | 460 | 215 | 90 | --- | --- | 720 | 368 | 170 | 69 | --- |
| "D" St. to Nuevo | 27,500 | 50,000 | 74.0 | 77.0 | 520 | 255 | 110 | --- | --- | 760 | 395 | 185 | 75 | --- |
| Nuevo to Ramona | 32,000 | 50,000 | 75.0 | 77.0 | 600 | 300 | 130 | 50 | --- | 760 | 395 | 185 | 75 | --- |
| N. of Ramona | 69,500 | 80,000 | 78.5 | 79.5 | 905 | 490 | 235 | 100 | --- | 1000 | 560 | 278 | 120 | --- |
| <u>RT. I-215 FRONTAGE ROAD</u> | | | | | | | | | | | | | | |
| Oleander Int. to Ramona | --- | 20,000 | --- | 69.0 | --- | --- | --- | --- | --- | 255 | 110 | --- | --- | --- |
| Ramona to Rider St. | --- | 21,000 | --- | 69.5 | --- | --- | --- | --- | --- | 278 | 120 | --- | --- | --- |
| Rider St. to Orange Ave. | --- | 22,000 | --- | 69.5 | --- | --- | --- | --- | --- | 278 | 120 | --- | --- | --- |
| Orange Ave. to Nuevo Rd. | --- | 25,000 | --- | 70.0 | --- | --- | --- | --- | --- | 300 | 130 | 50 | --- | --- |
| <u>WEBSTER AVENUE</u> | | | | | | | | | | | | | | |
| Oleander Ave. to Ramona | 50 | 5,000 | --- | 64.0 | --- | --- | --- | --- | --- | 110 | --- | --- | --- | --- |
| Ramona to Morgan St. | 1,000 | 4,000 | 60.0 | 63.5 | 50 | --- | --- | --- | --- | 100 | --- | --- | --- | --- |

APPENDIX IV

Noise Measurement Sites and Analysis of the Data

Appendix IV

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Est.
or
Meas
CNEL²

| Pos. No. | Location | Date | Time | Duration | Noise Source | A-Weighted Sound Level dB(A) ¹ | | | | | | | | | or Meas. CNEL ² |
|----------|--|----------|----------|----------|----------------------------|---|------|------|--------|------|------|---------|------|-----|----------------------------|
| | | | | | | Morning | | | Midday | | | Evening | | | |
| | | | | | | L50 | L10 | Leq | L50 | L10 | Leq | L50 | L10 | Leq | |
| 1 | NE corner, Perris & Ensenada 57' E. of Perris Blvd. | 09-06-85 | 8:22 am | 10 min | Traffic on Perris Blvd. | 59.8 | 70.0 | 66.0 | -- | -- | -- | -- | -- | -- | 65 |
| | | 09-06-85 | 12:00 pm | 10 min | -- | -- | -- | 60.0 | 69.0 | 64.4 | -- | -- | -- | | |
| | | 09-06-85 | 4:00 pm | 10 min | -- | -- | -- | -- | -- | -- | 60.0 | 68.8 | 64.7 | | |
| 2 | NE corner, Orange & Wilson, 100' N. of Orange | 09-06-85 | 8:50 am | 10 min | Traffic on Orange & Perris | 44.0 | 58.0 | 55.0 | -- | -- | -- | -- | -- | -- | 53 |
| | | 09-06-85 | 12:20 pm | 10 min | -- | -- | -- | 42.5 | 55.0 | 51.4 | -- | -- | -- | | |
| | | 09-06-85 | 4:20 pm | 10 min | -- | -- | -- | -- | -- | -- | 50.0 | 55.3 | 52.3 | | |
| 3 | N. end of Ruby Road | 09-06-85 | 9:11 am | 10 min | Traffic | 42.5 | 47.8 | 44.7 | -- | -- | -- | -- | -- | -- | 47 |
| | | 09-06-85 | 12:45 pm | 10 min | -- | -- | -- | 42.5 | 47.3 | 46.8 | -- | -- | -- | | |
| | | 09-06-85 | 4:47 pm | 10 min | -- | -- | -- | -- | -- | -- | 45.0 | 49.5 | 46.8 | | |
| 4 | NE corner, Nuevo & Jade, 60' N. of Jade | 09-06-85 | 9:34 am | 10 min | Traffic on Nuevo | 55.3 | 69.0 | 70.3 | -- | -- | -- | -- | -- | -- | 64 |
| | | 09-06-85 | 1:02 pm | 10 min | -- | -- | -- | 46.0 | 63.8 | 59.6 | -- | -- | -- | | |
| | | 09-06-85 | 5:18 pm | 10 min | -- | -- | -- | -- | -- | -- | 55.5 | 67.0 | 62.8 | | |
| 5 | End of Bowen Rd., 225' from freeway | 09-06-85 | 9:57 am | 10 min | Traffic on Rt. I-215 | 58.5 | 64.0 | 60.8 | -- | -- | -- | -- | -- | -- | 66 |
| | | 09-06-85 | 1:21 pm | 10 min | -- | -- | -- | 58.5 | 63.5 | 60.0 | -- | -- | -- | | |
| | | 09-06-85 | 5:38 pm | 10 min | -- | -- | -- | -- | -- | -- | 59.5 | 63.8 | 60.5 | | |
| 6 | Rear yard, 640 Richards Rd. | 09-11-85 | 10:00 am | 24 hrs | Traffic on Rt. I-215 | 58.0 | 66.0 | 63.3 | -- | -- | -- | -- | -- | -- | 65.5 |
| | | 09-11-85 | 1:00 pm | 24 hrs | -- | -- | -- | 59.0 | 66.0 | 63.5 | -- | -- | -- | | |
| | | 09-11-85 | 6:00 pm | 24 hrs | -- | -- | -- | -- | -- | -- | 59.0 | 66.0 | 65.4 | | |
| 7 | NE corner, Navajo & Mohawk, 60' N. of Navajo | 09-10-85 | 8:32 am | 10 min | Traffic on Navajo | 57.8 | 63.8 | 60.1 | -- | -- | -- | -- | -- | -- | 60 |
| | | 09-10-85 | 12:00 pm | 10 min | -- | -- | -- | 52.0 | 62.3 | 57.6 | -- | -- | -- | | |
| | | 09-10-85 | 4:09 pm | 10 min | -- | -- | -- | -- | -- | -- | 54.0 | 64.3 | 60.0 | | |
| 8 | NE corner, Park & 4th, 50' from 4th | 09-10-85 | 8:58 am | 10 min | Traffic on 4th | 64.0 | 69.0 | 65.9 | -- | -- | -- | -- | -- | -- | 67 |
| | | 09-10-85 | 12:29 pm | 10 min | -- | -- | -- | 65.0 | 69.5 | 66.7 | -- | -- | -- | | |
| | | 09-10-85 | 4:31 pm | 10 min | -- | -- | -- | -- | -- | -- | 66.3 | 70.3 | 67.9 | | |
| 9 | Rear yard of Senior Citizens' Center on "C" St. | 09-11-85 | 9:00 am | 24 hrs | Traffic & trains | 51.0 | 56.0 | 55.1 | -- | -- | -- | -- | -- | -- | 55.3 |
| | | 09-11-85 | 1:00 pm | 24 hrs | -- | -- | -- | 49.0 | 55.0 | 60.0 | -- | -- | -- | | |
| | | 09-10-85 | 5:00 pm | 24 hrs | -- | -- | -- | -- | -- | -- | 51.0 | 56.0 | 54.1 | | |
| 10 | Lake Perris Village Trailer Park, 65' from freeway | 09-10-85 | 9:24 am | 10 min | Traffic on Rt. I-215 | 65.5 | 70.5 | 67.3 | -- | -- | -- | -- | -- | -- | 73 |
| | | 09-10-85 | 12:49 pm | 10 min | -- | -- | -- | 63.5 | 71.3 | 66.9 | -- | -- | -- | | |
| | | 09-10-85 | 4:53 pm | 10 min | -- | -- | -- | -- | -- | -- | 66.0 | 72.0 | 68.5 | | |
| 11 | NW corner, Perou & Perris, 40' from Perris | 09-10-85 | 9:46 am | 10 min | Traffic on Perris | 43.0 | 50.5 | 49.7 | -- | -- | -- | -- | -- | -- | 52 |
| | | 09-10-85 | 1:10 pm | 10 min | -- | -- | -- | 43.3 | 50.0 | 50.8 | -- | -- | -- | | |
| | | 09-10-85 | 5:15 pm | 10 min | -- | -- | -- | -- | -- | -- | 47.5 | 57.8 | 54.2 | | |
| 12 | N. end of runway, Perris Valley Airport (1982) | 07-31-82 | 8:39 am | 1 hr | Aircraft | -- | -- | -- | -- | -- | -- | -- | -- | -- | 60 |

Table IV-1. Noise Measurements, City of Perris (continued)

| Pos. No. | Location | Date | Time | Duration | Noise Source | A-Weighted Sound Level dB(A) ¹ | | | | | | | | | Est. or Heard, CNEL |
|-------------|---|----------|----------|----------|-------------------|---|------|------|--------|------|------|---------|------|------|------------------------------|
| | | | | | | Morning | | | Midday | | | Evening | | | |
| | | | | | | L50 | L10 | Leq | L50 | L10 | Leq | L50 | L10 | Leq | |
| 24 | SW corner, Rider & El Nido, 130' from Rider | 09-12-85 | 9:57 am | 10 min | Traffic on Rider | 40.0 | 48.5 | 48.2 | -- | -- | -- | -- | -- | -- | 47 |
| | | 09-12-85 | 1:40 pm | 10 min | | -- | -- | -- | 35.0 | 44.8 | 45.1 | -- | -- | -- | |
| | | 09-12-85 | 5:23 pm | 10 min | | -- | -- | -- | -- | -- | -- | 42.3 | 47.3 | 46.4 | |
| 25 | SW corner, Ramona & Bradley, 80' from Ramona | 09-12-85 | 10:22 am | 10 min | Traffic on Ramona | 57.0 | 68.3 | 64.4 | -- | -- | -- | -- | -- | -- | 62 |
| | | 09-12-85 | 1:58 pm | 10 min | | -- | -- | -- | 50.8 | 62.8 | 59.1 | -- | -- | -- | |
| | | 09-12-85 | 5:40 pm | 10 min | | -- | -- | -- | -- | -- | -- | 54.3 | 61.8 | 57.3 | |

NOTES

1. L50 and L10 are the sound levels exceeded during 50% and 10% of the measurement period, respectively. Leq is the equivalent sound level. "Morning" refers to the hours of 8:00 am to 10:00 am, "Midday" refers to the hours from 12:00 pm to 2:00 pm, and "Evening" refers to the hours from 4:00 pm to 6:00 pm.
2. Value in "CNEL" column is estimated from measured Leq values. The value takes into account the barrier effects of adjacent structures as well as the topography. Therefore, the measured value differs from that indicated on the CNEL contour maps. Values reflect traffic noise only.

Table IV-2 - Measured Sound Exposure Level Data of Flight
Operations Involving KC-135 Aircraft at the
North End of Ruby Drive, Perris, CA

| <u>Date (1980)</u> | <u>Pattern</u> | <u>Sound Exposure Level (SEL)</u> |
|--------------------|----------------|-----------------------------------|
| 9/17 | Approach | 79.6 dB |
| 9/17 | Approach | 82.9 |
| 9/17 | Approach | 88.7 |
| 9/17 | Approach | 77.1 |
| 10/29 | Approach | 86.0* |
| 11/12 | Approach | 84.5 |
| 11/12 | Approach | 88.5 |

Average Approach SEL: 84.5 dB

* RECORDED UNDER WINDY CONDITIONS.

Table IV-3 - Measured Sound Exposure Level Data of Flight
Operations Involving C-141 Aircraft at the
North End of Ruby Drive, Perris, CA

| <u>Date (1980)</u> | <u>Pattern</u> | <u>Sound Exposure Level (SEL)</u> |
|--------------------|------------------------|-----------------------------------|
| 9/08 | Approach | 84.8* dB |
| 9/08 | Approach | 84.4* |
| 9/08 | Approach | 83.1* |
| 9/08 | Approach | 77.1 |
| 9/08 | Approach | 81.1* |
| 9/08 | Approach | 79.5* |
| 9/08 | Approach | 81.8* |
| 9/08 | Approach | 71.4 |
| 9/08 | Approach | 83.7* |
| 9/08 | Approach north of site | 72.1 |
| 9/08 | Overhead, NW-SE | 75.0 |
| 9/08 | Approach | 75.6 |
| 9/08 | Approach | 81.9* |
| 9/08 | Approach | 82.3* |
| 9/08 | Approach | 84.0* |
| 9/08 | Approach | 87.6* |
| 9/08 | Approach | 75.1 |
| 9/08 | Approach north of site | 67.3 |
| 9/08 | Approach | 83.1* |
| 9/08 | Approach north of site | 88.1 |
| 9/17 | Approach | 75.8 |
| 9/17 | Approach | 79.4* |
| 9/17 | Approach | 66.8 |
| 9/17 | Approach | 76.7 |
| 9/17 | Approach | 77.1 |
| 9/17 | Approach | 75.9 |
| 9/17 | Approach | 71.5 |
| 9/17 | Approach | 76.1 |
| 9/17 | Approach | 76.1 |
| 9/17 | Approach | 78.2 |
| 9/17 | Approach | 74.5 |
| 9/17 | Approach | 78.0 |
| 9/17 | Approach | 72.9 |
| 9/17 | Approach | 75.1 |
| 9/17 | Approach | 76.0 |

Table IV- 3. Continued

| <u>Date (1980)</u> | <u>Pattern</u> | <u>Sound Exposure Level (SEL)</u> |
|--------------------|----------------|-----------------------------------|
| 9/17 | Approach | 70.7 |
| 9/17 | Approach | 76.2 |
| 9/17 | Approach | 73.9 |
| 9/17 | Approach | 70.7 |
| 9/17 | Approach | 75.3 |
| 9/17 | Approach | 76.1 |
| 9/17 | Approach | 76.8 |
| 9/17 | Approach | 71.0 |
| 9/17 | Approach | 68.5 |
| 9/17 | Approach | 77.8 |
| 9/17 | Approach | 76.2 |
| 9/17 | Approach | 73.0 |
| 9/17 | Approach | 75.0 |
| 11/12 | Approach | 74.8 |
| 11/12 | Approach | 85.0* |
| 11/13 | Approach | 78.1* |
| 11/13 | Approach | 79.2* |
| 11/13 | Approach | 72.2* |
| 11/13 | Approach | 66.5* |
| 11/13 | Approach | 70.1* |

Average Approach SEL: 79.6 dB

Average SEL of Approach North of Site: 83.5 dB

Average SEL of Top 30% of Sample Approaches: 83.5 dB

*RECORDED UNDER WINDY CONDITIONS

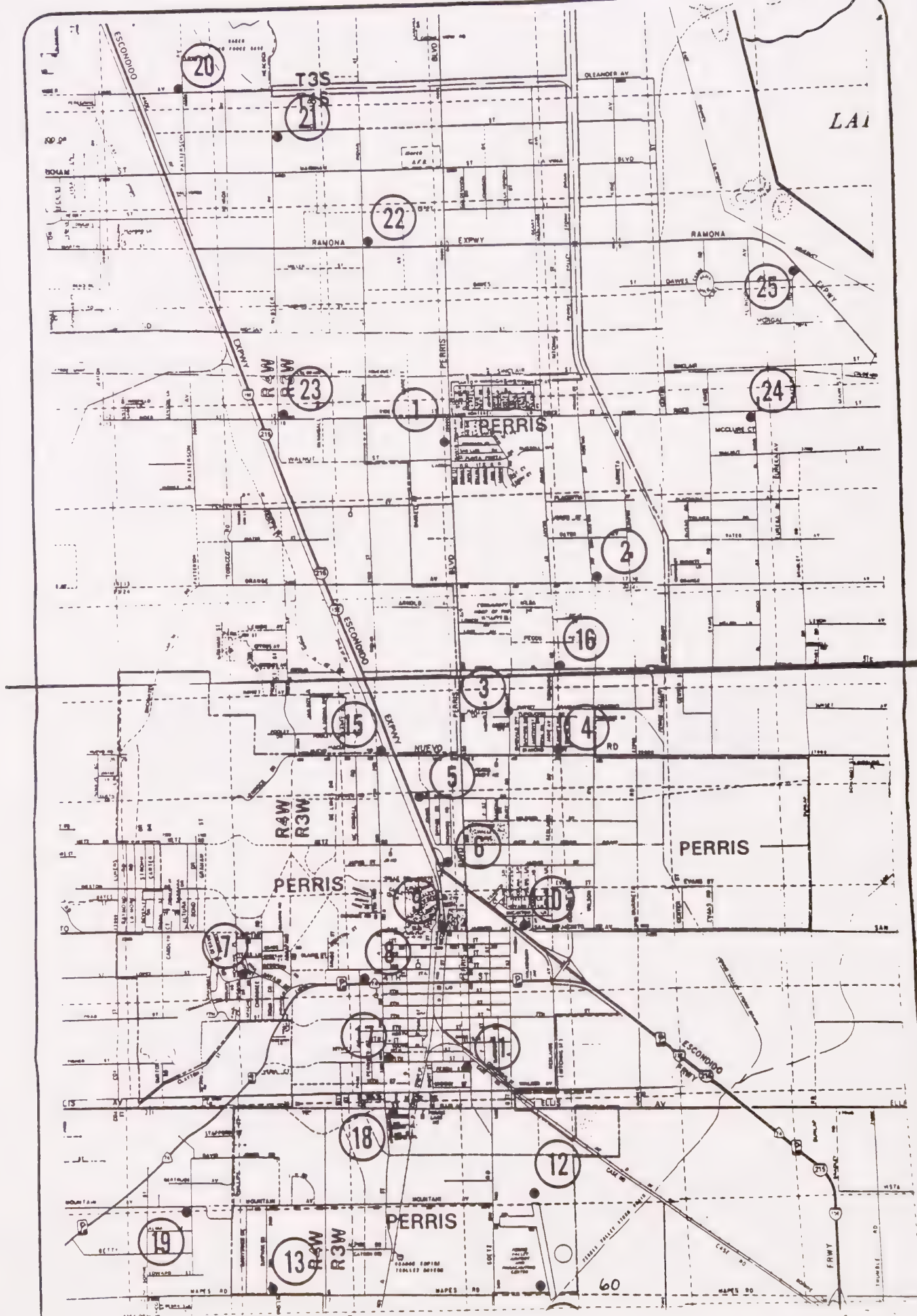
Table IV-4. Measured Sound Exposure Level and Maximum Sound Level Data
of Flight Operations at Perris Valley Airport, July 31, 1982.

| <u>Location</u> | <u>Aircraft and Pattern</u> | <u>Maximum Sound Levels</u> | <u>Sound Exposure Level (SEL)</u> |
|-----------------|--|---------------------------------|---------------------------------------|
| North of Runway | Single Engine, Landing S-N | Below Ambient | Below Ambient |
| North of Runway | Twin Engine, Flyby overhead N-S | 57 dB(A) | --- |
| North of Runway | Twin engine, landing S-N | 52 | 60.7 dB(A) |
| North of Runway | Twin engine, taxiing at N end of runway | 50 | 60.6 |
| North of Runway | Twin engine taking off, N-S | 44 | --- |
| North of Runway | Twin engine, circling overhead | 53 | --- |
| North of Runway | Single engine, landing S-N | Below Ambient | Below Ambient |
| North of Runway | Twin engine, landing S-N | 47 | --- |
| | | | |
| South of Runway | Single engine, flyby W-E | 52 | --- |
| South of Runway | Single engine, takeoff N-S | 80 | 81.0 |
| South of Runway | Twin engine, takeoff N-S | 85 | 85.8 |
| South of Runway | Single engine, flyby S-N | 62 | 71.3 |
| South of Runway | Single engine, flyby S-N | 54 | 68.6 |
| South of Runway | Single engine, landing N-S | Below Ambient | Below Ambient |
| South of Runway | Single engine, takeoff N-S | 80 | 83.0 |
| South of Runway | Twin engine, landing S-N | 74 | 80.2 |

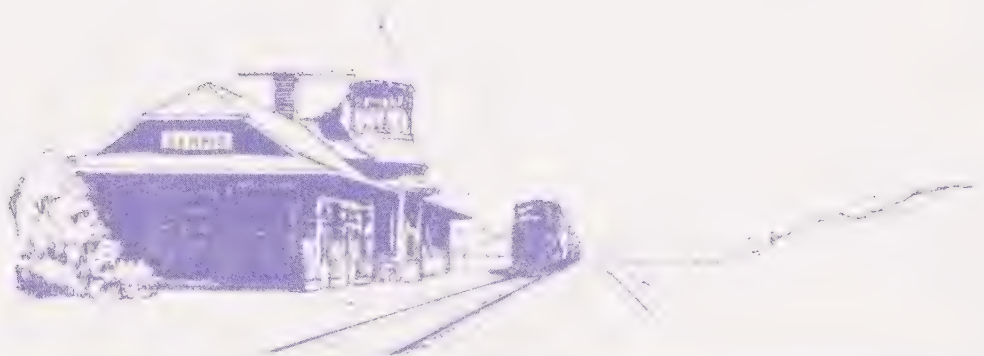
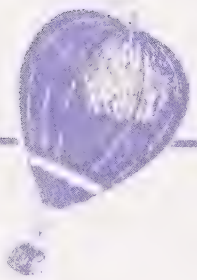
Table IV-5. Range of Maximum Aircraft Sound Levels Measured Throughout the City of Perris, September 1985

| <u>Measurement Position*</u> | <u>Location</u> | <u>Range of Maximum Sound Levels</u> |
|----------------------------------|--------------------------------|--|
| 1. | Corner of Perris & Ensenada | : 71 dB(A) |
| 3. | N. end of Ruby Drive | 67-88 |
| 4. | Corner of Nuevo & Jade | 71-90 |
| 5. | End of Bowen Rd. | 69-81 |
| 7. | Corner of Navajo & Mohawk | 65-68 |
| 11. | Corner of Perou & Perris | 62-68 |
| 13. | Corner of Mapes & Sunpark | 60-61 |
| 15. | Corner of "A" & Nuevo | 67-68 |
| 16. | Corner of Citrus & Redland | 62-88 |
| 18. | Corner of Ellis & Willow | 70 |
| 19. | Corner of Mountain & Phillips | 68 |
| 20. | Corner of Oleander & Patterson | 73-78 |
| 21. | Corner of Webster & Nance | 82-90 |
| 22. | Corner of Ramona & Indian | 76-85 |
| 23. | Corner of Rider & Webster | 70-76 |
| 24. | Corner of Rider & El Nido | 63-68 |
| 25. | Corner of Ramona & Bradley | 70-71 |

* Refer to Figure IV-1



PERRIS



GENERAL PLAN

THIS SECTION IS RESERVED

PERRIS



GENERAL PLAN

CITY OF PERRIS

GLOSSARY

OCTOBER 14, 1991

GLOSSARY

Access - A way of approaching or entering a property, including ingress (the right to enter) and egress (the right to leave).

Acreage, Net - That portion of gross acreage exclusive of streets and all public lands and rights-of-way.

Air Basin - One of 14 self-contained regions minimally influenced by air quality in contiguous regions.

Air Pollutant Emissions - Discharges into the atmosphere, usually specified in terms of weight per unit of time for a given pollutant from a given source.

Air Pollution - The presence of contaminants in the air in concentrations that prevent the normal dispersive ability of the air and that interfere directly or indirectly with man's health, safety or comfort, or with the full use and enjoyment of property.

Air Quality Standards - The prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

Ambient Noise Level - The composite of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Annexation - The incorporation of a land area into an existing community with a resulting change in the boundaries of that community.

Application For Development - The application form(s) and all accompanying documents and exhibits required of an applicant by an approving authority for development review by governmental agency(s).

Aquifer - An underground bed or stratum of earth, gravel or porous stone that contains water.

Archaeological Site - Land or water areas which show evidence or artifacts of human, plant or animal activity, usually dating from periods of which only vestiges remain.

10. 11. 2000

1. 1957

Arterial - A major street carrying the traffic of local and collector streets to and from freeways and other major streets, with controlled intersections and generally providing direct access to nonresidential properties.

A-Weighted Decibel (dBA) - A numerical method of rating human judgement of loudness. The sound pressure level in decibels, as measured on a sound meter, uses an A-weighting filter to de-emphasize the very low and very high frequency components of sound in a manner similar to the response of the human ear.

Base Flood Elevation - The highest elevation, expressed in feet above sea level, of the level of flood waters occurring in the regulatory base flood.

Buffer - A strip of land designated to protect one type of land use from another with which it is incompatible. Where a commercial district abuts a residential district, for example, additional use, yard, or height restrictions may be imposed to protect residential properties. The term may also be used to describe any zone that separates two unlike zones such as a multi-family housing zone between single family housing and commercial uses.

Building - Any structure having a roof supported by columns or walls and intended for the shelter, housing or enclosure of any individual, animal, process, equipment, goods or materials of any kind or nature.

Capital Improvement Program - A proposed timetable or schedule of all future capital improvements (government acquisition of real property, major construction project, or acquisition of long lasting, expensive equipment) to be carried out during a specific period and listed in order of priority, together with cost estimates and the anticipated means of financing each project. Capital improvement programs are usually projected five or six years in advance and should be updated annually.

Clean Air Act - Federal legislation establishing national air quality standards.

Collector - A street for traffic moving between arterial and local streets, generally providing direct access to properties.

Community Noise Equivalent Level (CNEL) - The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m.

1. The first part of the report
describes the general situation
of the country and the
main problems which
are facing it.

2. The second part
describes the main
features of the
country's economy.

3. The third part
describes the main
features of the
country's culture.

4. The fourth part
describes the main
features of the
country's politics.

5. The fifth part
describes the main
features of the
country's social life.

6. The sixth part
describes the main
features of the
country's education.

7. The seventh part
describes the main
features of the
country's health.

8. The eighth part
describes the main
features of the
country's environment.

9. The ninth part
describes the main
features of the
country's foreign relations.

10. The tenth part
describes the main
features of the
country's future.

Compatibility - The characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict. The designation of permitted and conditionally permitted uses in zoning districts are intended to achieve compatibility within the district. Some elements affecting compatibility include: intensity of occupancy as measured by dwelling units per acre; pedestrian or vehicular traffic generated; volume of goods handled; and such environmental effects as noise, vibration, glare, air pollution, or radiation. On the other hand, many aspects of compatibility are based on personal preference and are much harder to measure quantitatively, at least for regulatory purposes.

Condominium - A building, or group of buildings, in which units are owned individually, and the structure, common areas and facilities are owned by all the owners on a proportional, undivided basis.

Congregate Care Housing - Generally defined as age-segregated housing built specifically for the elderly which provides services to its residents, the minimum of which is usually an on-site meal program, but which may also include housekeeping, social activities, counseling, and transportation. There is generally a minimum health requirement for acceptance into a congregate facility as most do not offer supportive health care services, thus differing from a nursing home. Residents usually have their own bedrooms and share common areas such as living rooms, dining rooms, and kitchens; bathrooms may or may not be shared.

Conservation - The management of natural resources to prevent waste, destruction or neglect.

Cooperative - A group of dwellings or an apartment building that is jointly owned by the residents, the common ownership including the open space and all other parts of the property. The purchase of stock entitles the buyer to sole occupancy, but not the individual ownership of a specified unit.

Council of Governments (COG) - A regional planning and review authority whose membership includes representation from all communities in the designated region. The Southern California Association of Governments (SCAG), the San Diego Association of Governments (SANDAG) and the San Bernardino Association of Governments (SANBAG) are examples of COGs in Southern California.

Coverage - The proportion of the area of the footprint of a building to the area of the lot on which it stands.

Day-Night Average Level (Ldn) - The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m.

1. The first part of the paper discusses the importance of the study of the history of the United States.

2. The second part of the paper discusses the importance of the study of the history of the United States.

3. The third part of the paper discusses the importance of the study of the history of the United States.

4. The fourth part of the paper discusses the importance of the study of the history of the United States.

5. The fifth part of the paper discusses the importance of the study of the history of the United States.

6. The sixth part of the paper discusses the importance of the study of the history of the United States.

7. The seventh part of the paper discusses the importance of the study of the history of the United States.

8. The eighth part of the paper discusses the importance of the study of the history of the United States.

9. The ninth part of the paper discusses the importance of the study of the history of the United States.

10. The tenth part of the paper discusses the importance of the study of the history of the United States.

11. The eleventh part of the paper discusses the importance of the study of the history of the United States.

12. The twelfth part of the paper discusses the importance of the study of the history of the United States.

Decibel (Db) - A unit for describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).

Density - The number of families, individuals, dwelling units or housing structures per unit of land; usually density is expressed "per acre." Thus, the density of a development of 100 units occupying 20 acres is 5.0 units per acre.

Development - The division of a parcel of land into two or more parcels; the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure; any mining, excavation, landfill or land disturbance, and any use or extension of the use of land.

Development Impact Fees - A fee or charge imposed on developers to pay for the costs to the community of providing services to a new development.

Development Plan - A plan, to scale, showing uses and structures proposed for a parcel or multiple parcels of land. It includes lot lines, streets, building sites, public open space, buildings, major landscape features and locations of proposed utility services.

Dwelling - A structure or portion of a structure used exclusively for human habitation.

Dwelling, Multifamily - A building containing two or more dwelling units, generally rented individually for the use of individual families maintaining households; an apartment building is an example of this dwelling unit type.

Dwelling, Single Family Attached - A one family dwelling attached to one or more other one family dwellings by a common vertical wall; condominiums and townhomes are examples of this dwelling unit type.

Dwelling, Single Family Detached - A dwelling which is designed for and occupied by not more than one family and surrounded by open space or yards and which is not attached to any other dwelling by any means.

Dwelling Unit - One or more rooms, designed, occupied or intended for occupancy as separate living quarters, with cooking, sleeping and sanitary facilities provided within the unit for the exclusive use of a single family maintaining a household.

Easement - A grant of one or more of the property rights by the property owner to and/or for use by the public, a corporation, or another person or entity.

THE STATE OF NEW YORK
IN SENATE

JANUARY 1, 1901.

REPORT OF THE

COMMISSIONER OF THE LAND OFFICE

IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE
JANUARY 1, 1899.

ALBANY:
J. B. LEECH, STATE PRINTER.

1901.

ALBANY: J. B. LEECH, STATE PRINTER.

2

STATE OF NEW YORK
LAND OFFICE
ALBANY, N. Y.

JANUARY 1, 1901.

REPORT OF THE
COMMISSIONER OF THE LAND OFFICE
IN RESPONSE TO A RESOLUTION PASSED BY THE SENATE
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ALBANY:
J. B. LEECH, STATE PRINTER.

Economic Base - The production, distribution and consumption of goods and services within a planning area.

Element - A division of the General Plan referring to a topic area for which goals, policies, and programs are defined (e.g., land use, housing, circulation).

Eminent Domain - The authority of a government to take, or to authorize the taking of, private property for public use.

Environment - The sum of all external conditions and influences affecting the life, development and, ultimately, the survival of an organism.

Environmental Impact Assessment - An assessment of a proposed project of activity to determine whether it will have significant environmental effects on the natural and man-made environments.

Environmental Impact Report - A report, as prescribed by the California Environmental Quality Act (CEQA), on the effect of a development proposal and other major actions which significantly affect the environment.

Essential Facilities - Those facilities whose continued functioning is necessary to maintain public health and safety following a disaster. These facilities include fire and police stations, communications facilities, emergency operation centers, hospitals, administrative buildings, and schools designated as mass care shelters. Also included are key transportation facilities and utility facilities such as water supply, sewage disposal, gas storage facilities and transmission lines, and electric generation stations and transmission lines.

Fault - A fracture in the earth's crust forming a boundary between rock masses that have shifted.

Fault, Active - A fault that has moved recently and which is likely to move again. For planning purposes, an "active fault" is usually defined as one that shows movement within the last 11,000 years and can be expected to move within the next 100 years.

Fault, Inactive - A fault which shows no evidence of movement in recent geologic time and no potential for movement in the relatively near future.

Fault, Potentially Active - A fault that last moved within the Quaternary Period (the last 2,000,000 to 11,000 years) before the Holocene Epoch (11,000 years to the present); or a fault which, because it is judged to be capable of ground rupture or shaking, poses an unacceptable risk for a proposed structure.

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

[illegible]

... ..

INVESTIGATION OF CONDUCTED BY THE FBI ON APRIL 1968
OF THE FBI AND PROVIDED TO THE FBI ON APRIL 1968

time to be assigned to the job. The time to be assigned to the job is the time to be assigned to the job.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 11-19-01 BY 60322 UCBAW

Einige der wichtigsten Punkte sind:

Fire Flow - A rate of water flow that should be maintained to halt and reverse the spread of a fire.

Flood Plain - A lowland or relatively flat area adjoining inland or coastal waters that is subject to a one percent or greater chance of flooding in any given year (i.e., 100-year flood).

Flood, Regulatory Base - Flood having a one percent chance of being equalled or exceeded in any given year (100-year flood).

Floodway - The channel of a natural stream or river and portions of the flood plain adjoining the channel, which are reasonably required to carry and discharge the floodwater or flood flow of any natural stream or river.

Floor Area Ratio (FAR) - The gross floor area of all buildings on a lot divided by the lot area; usually expressed as a numerical value (e.g., a building having 5,000 square feet of gross floor area located on a lot of 10,000 square feet in area has a floor area ratio of .5:1).

General Plan - A legal document which takes the form of a map and accompanying text adopted by the local legislative body. The plan is a compendium of policies regarding the long-term development of a jurisdiction. The state requires the preparation of seven elements or divisions as part of the plan: land use, housing, circulation, conservation, open space, noise, and safety. Additional elements pertaining to the unique needs of an agency are permitted.

Goal - The ultimate purpose of an effort stated in a way that is general in nature and immeasurable; a broad statement of intended direction and purpose (e.g., "Provide a balance of land use types within the city").

Grade - The degree of rise or descent of a sloping surface.

Greenbelt - An open area which may be cultivated or maintained in a natural state surrounding development or used as a buffer between land uses or to mark the edge of an urban or developed area.

Ground Failure - Mudslide, landslide, liquefaction or the compaction of soils due to seismic-induced groundshaking.

Groundwater - The supply of fresh water under the ground surface in an aquifer or soil that forms a natural reservoir.

Group Quarters - A dwelling that houses unrelated individuals.

THE UNITED STATES OF AMERICA

1

IN SENATE, JANUARY 10, 1917.

REPORT OF THE COMMISSIONER OF THE GENERAL LAND OFFICE, DEPARTMENT OF THE INTERIOR, FOR THE YEAR 1916.

WASHINGTON: GOVERNMENT PRINTING OFFICE, 1917.

For sale by the Superintendent of Documents, U. S. GOVERNMENT PRINTING OFFICE, Washington, D. C.

Price, 10 cents.

Order by mail from Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.

Postage paid by addressee.

Accepted for mailing at special rate of postage provided for in Act of October 3, 1917.

Authorizing the purchase of the above described material for the use of the Department of the Interior.

1917-18

Growth Management - Techniques used by government to control the rate, amount and type of development.

Hazardous Materials - An injurious substance, including pesticides, herbicides, toxic metals and chemicals, liquified natural gas, explosives, volatile chemicals and nuclear fuels.

Historic Area - A district, zone or site designated by local, state or federal authorities within which buildings, structures and places are of basic and vital importance due to their association with history, or their unique architectural style and scale, or their relationship to a square or park, and therefore should be preserved and/or developed in accord with a fixed plan.

Household - According to the Census, a household is all persons living in a dwelling unit whether or not they are related. Both a single person living in an apartment and a family living in a house are considered households.

Household Income - The total income of all the people living in a household. Households are usually described as very low income, low income, moderate income, and upper income for that household size, based on their position relative to the regional median income.

Housing Affordability - Based on State and Federal standards, housing is affordable when the housing costs are no more than 25 percent of household income.

Housing Unit - A room or group of rooms used by one or more individuals living separately from others in the structure, with direct access to the outside or to a public hall and containing separate toilet and kitchen facilities.

Human Services - The programs which are provided by the local, state, or federal government to meet the health, welfare, recreational, cultural, educational, and other special needs of its residents.

Implementation Measure - An action, procedure, program, or technique that carries out general plan policy.

Income Categories - Four categories for classifying households according to income based on the median income for each County. The categories are as follows: Very Low (0-50% of County median); Low (50-80% of County median); Moderate (8-120% of County median); and Upper (over 120% of County median).

[illegible][illegible]

DO NOT WRITE IN THESE SPACES

1950

1944

26. The following are the names of the persons who have been
admitted to the office of the Secretary of the State since the
last meeting of the Board of Education.

1960-1961 1962-1963 1964-1965 1966-1967 1968-1969

THE DIRECTOR, FBI, WASHINGTON, D.C. 20535

of being the only one to have a...

PROBATIONER: I have been in the service of the
 State of New York for the past five years and
 have been a member of the State Bar of New York
 for the past three years.

period, during the previous 12 months, the respondent had been in the armed forces of the United States or had been a member of the National Guard or Reserve of the United States.

1. The first step is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

Infrastructure - The physical systems and services which support development and population, such as roadways, railroads, water, sewer, natural gas, electrical generation and transmission, telephone, cable television, storm drainage, and others.

Intensity - A measure of the amount or level of development often expressed as the ratio of building floor area to lot area (floor area ratio) for commercial, business, and industrial development, or units per acre of land for residential development (also called "density").

Issue - A problem, constraint, or opportunity requiring community action.

Intersection - Where two or more roads cross at grade.

Land Use - A description of how land use is occupied or used.

Land Use Plan - A plan showing the existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational and other public and private purposes or combination of purposes.

Landslide - A general term for a falling or sliding mass of soil or rocks.

Liquefaction - A process by which water-saturated granular soils transform from a solid to a liquid state due to groundshaking. This phenomenon usually results from shaking from energy waves released in an earthquake.

Local Street - A street providing direct access to properties and designed to discourage through-traffic.

Lot - The basic unit of land development. A designated parcel or area of land established by plat, subdivision, or as otherwise permitted by law, to be used, developed or built upon as a unit.

Median Income - The annual income for each household size which is defined annually by the Federal Department of Housing and Urban Development. Half of the households in the region have incomes above the median and half are below.

Mobile Home - A structure, transportable in one or more sections, which is at least 8 feet in width and 32 feet in length, which is built on a permanent chassis and designed to be used as a dwelling unit, with or without a permanent foundation when connected to the required utilities.

[illegible]

(Faint handwritten notes at the bottom of the page)

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1861. It is a formal address, and it begins with the words "I have the honor to acknowledge the receipt of your letter of the 28th inst."

1. The first of these is the fact that the
2. second of these is the fact that the
3. third of these is the fact that the
4. fourth of these is the fact that the
5. fifth of these is the fact that the
6. sixth of these is the fact that the
7. seventh of these is the fact that the
8. eighth of these is the fact that the
9. ninth of these is the fact that the
10. tenth of these is the fact that the

Die P... ..
... ..

There is no doubt that the above information is true and correct.

62

1. The Committee has received information from the Department of the Interior, Bureau of Indian Affairs, that the following individuals are currently residing in the United States and are known to be active in the Communist Party, U.S.A.:

...the ...
...the ...

[illegible]

to be a biological or physical process, and to be a process that is not a biological or physical process.

1942

National Flood Insurance Program - A federal program which authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.

Noise - Any undesired audible sound.

Noise Exposure Contours - Lines drawn about a noise source indicating constant energy levels of noise exposure. CNEL and Ldn are the metrics utilized to describe community noise exposure.

Non-Domestic Water - Water consisting of but not limited to, a combination of treated wastewater and intercepted surface stream flow, supplemented by other waters including potable water.

Open Space - Any parcel or area of land or water essentially unimproved and set aside, designated, dedicated or reserved for public or private use or enjoyment.

Overcrowding - As defined by the Census, with greater than 1.01 persons per room, excluding bathrooms, kitchens, hallways, and porches.

Parcel - a lot or tract of land.

Policy - Statements guiding action and implying clear commitment found within each element of the general plan (e.g., "Provide incentives to assist in the development of affordable housing").

Program - A coordinated set of specific measures and actions (e.g., zoning, subdivision procedures, and capital expenditures) the local government intends to use in carrying out the policies of the general plan.

Redevelopment - Redevelopment, under the California Community Redevelopment Law, is a process with the authority, scope, and financing mechanisms necessary to provide stimulus to reverse current negative business trends, remedy blight, provide job development incentives, and create a new image for a community. It provides for the planning, development, redesign, clearance, reconstruction, or rehabilitation, or any combination of these, and the provision of public and private improvements as may be appropriate or necessary in the interest of the general welfare. In a more general sense, redevelopment is a process in which existing development and use of land is replaced with newer development and/or use.

Rehabilitation - The upgrading of a building previously in a dilapidated or substandard condition, for human habitation or use.

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Restoration - The replication or reconstruction of a building's original architectural features, usually describing the technique of preserving historic buildings.

Right-of-Way - A strip of land acquired by reservation, dedication, prescription or condemnation and intended to be occupied or occupied by a road, crosswalk, railroad, electric transmission lines, oil or gas pipeline, water line, sanitary or storm sewer, or other similar uses.

Sensitive Species - Includes those plant and animal species considered threatened or endangered by the U.S. Fish and Wildlife Service and/or the California Department of Fish and Game according to Section 3 of the Federal Endangered Species Act. Endangered - any species in danger of extinction throughout all, or a significant portion of, its range. Threatened - a species likely to become an endangered species within the foreseeable future throughout all, or a portion of, its range. These species are periodically listed in the Federal Register and are, therefore, referred to as "federally listed" species.

Sewer - Any pipe or conduit used to collect and carry away sewage from the generating source to a treatment plant.

Site Plan - The development plan for one or more lots on which is shown the existing and proposed conditions of the lot including: topography, vegetation, drainage, floodplains, marshes and waterways; open spaces, walkways, means of ingress and egress, utility services, landscaping, structures and signs, lighting, and screening devices; any other information that reasonably may be required in order that an informed decision can be made by the approving authority.

Solar Access - A property owner's right to have the sunlight shine on his/her land.

Solid Waste - Unwanted or discarded material, including garbage with insufficient liquid content to be free flowing, generally disposed of in land fills or incinerated.

Special District - A district created by act, petition or vote of the residents for a specific purpose with the power to levy taxes.

Special Needs Groups - Those segments of the population which have a more difficult time finding decent affordable housing due to special circumstances. Under State planning law, these special needs groups consist of the elderly, handicapped, large families, female-headed households, farmworkers and the homeless.

in the vicinity of the subject property, the following information is being furnished to you for your information and use:

1. The following is a list of the subject property:

2. The following is a list of the subject property:

3. The following is a list of the subject property:

4. The following is a list of the subject property:

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9. The following is a list of the subject property:

Standard Metropolitan Statistical Area (SMSA) - A county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or twin cities of a combined population of at least 50,000.

Stationary Source - A non-mobile emitter of pollution.

Subdivision - The division of a lot, tract or parcel of land that is the subject of an application for subdivision.

Survey - The process of precisely ascertaining the area, dimensions and location of a piece of land.

Transportation Systems Management - Individual actions or comprehensive plans to reduce the number of vehicular trips generated by or attracted to new or existing development. TSM measures attempt to reduce the number of vehicle trips by increasing bicycle or pedestrian trips or by expanding the use of bus, transit, carpool, vanpool, or other high occupancy vehicles.

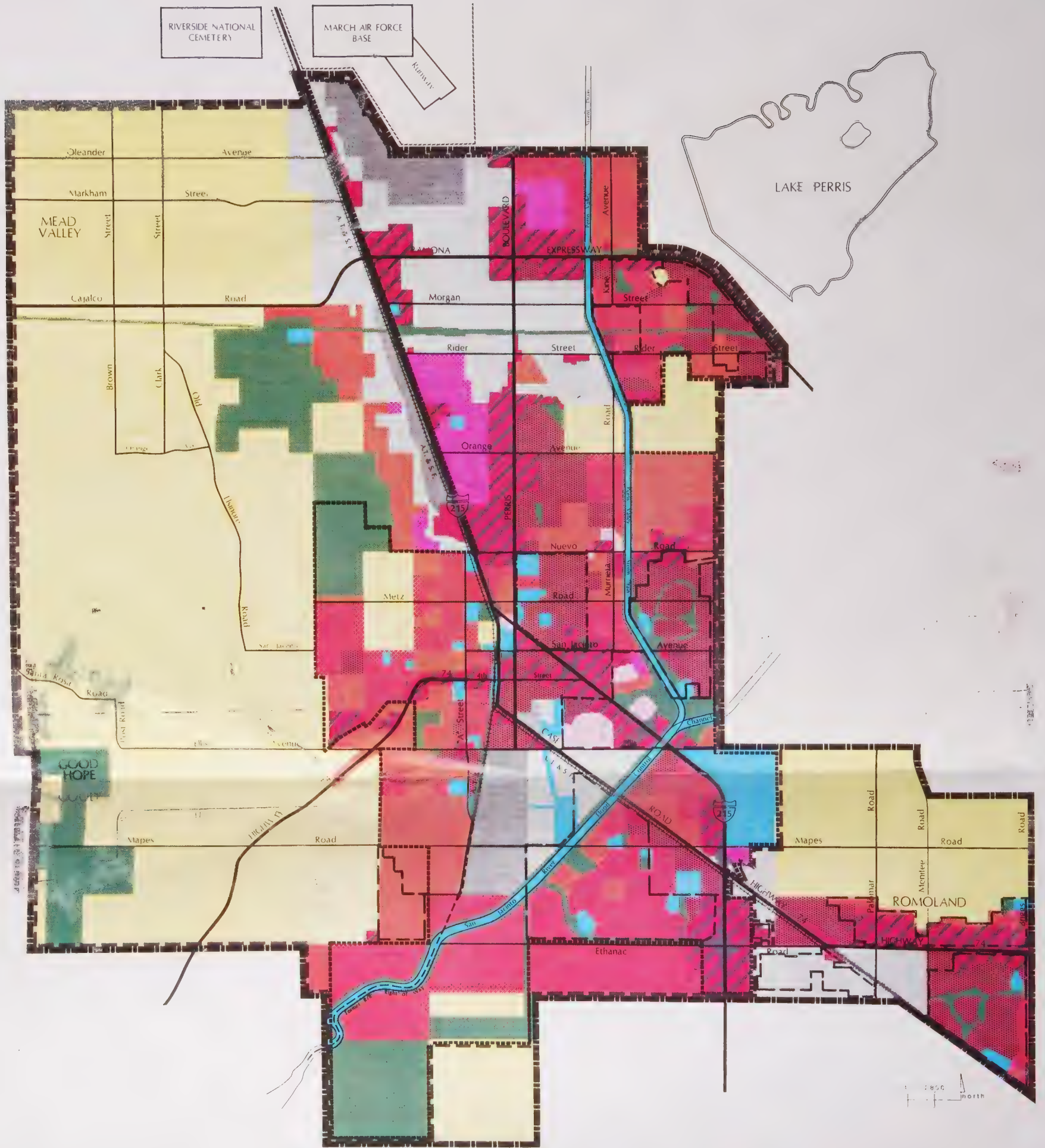
Water Course - Any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine or wash in which water flows in a definite channel, bed and banks, and includes any area adjacent thereto subject to inundation by reason of overflow or flood water.

Wetland - An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Zoning - A police power measure, enacted primarily by units of local government, in which the community is divided into districts or zones within which permitted and special uses are established as are regulations governing lot size, building bulk, placement, and other development standards. Requirements vary from district to district, but they must be uniform within the same district. The zoning ordinance consists of a map and text.

Zoning District - A geographical area of a city zoned with uniform regulations and requirements.

Zoning Map - The officially adopted zoning map of the city specifying the uses permitted within certain geographic areas of the city.



Land Use Policy Map

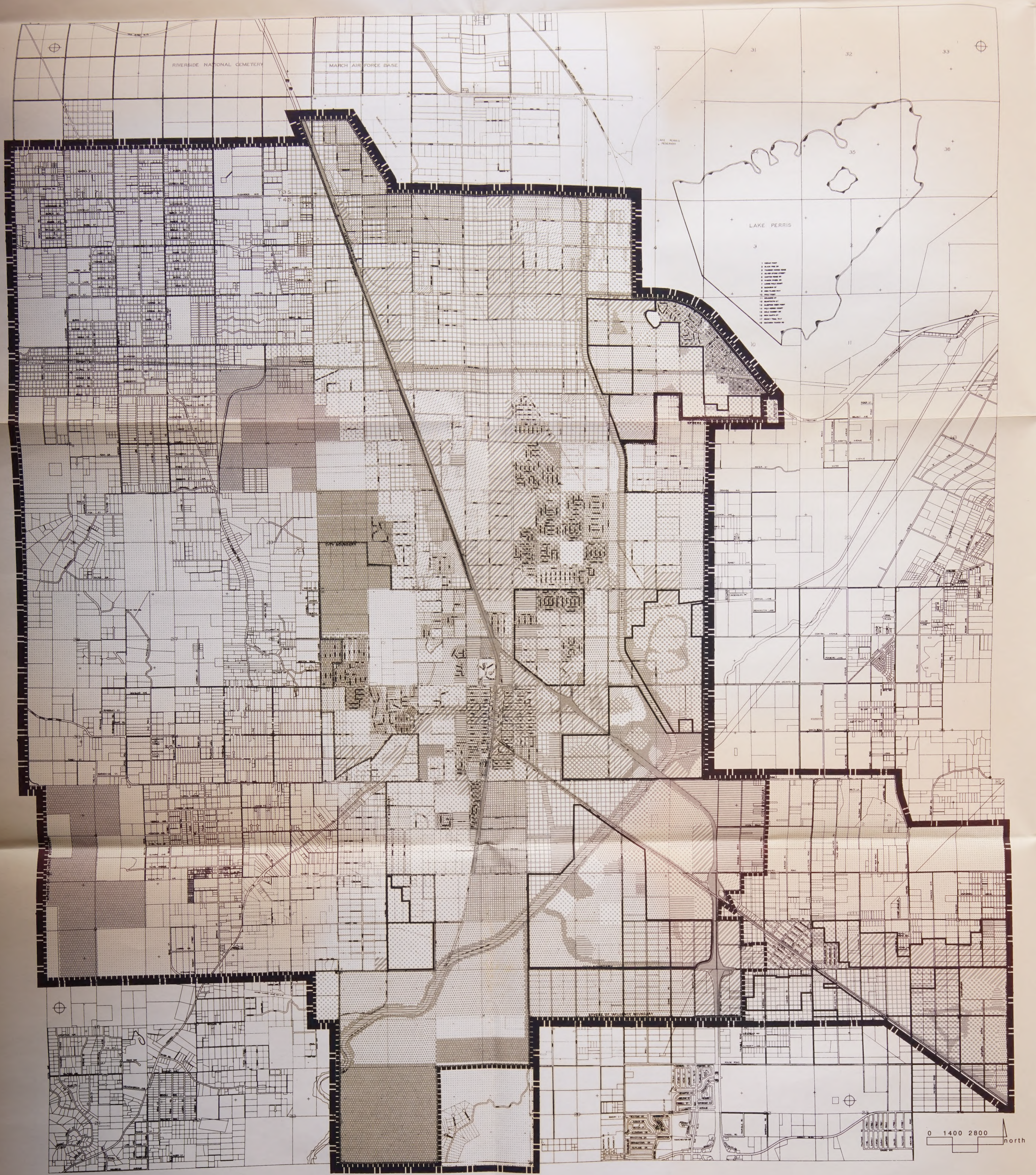
Adopted by Resolution
No. 2018 - October 28, 1991

**Mildred Street
Community Area**

The Mildred Street Community Area, a special Residential district, identifies which areas are to be developed as single family or multi-family dwelling units. Refer to the text of the Land Use Element of the General Plan for additional information.

- Rural Residential/Agriculture
- Residential 4 2-4 DU/AC
- Residential 7 4-7 DU/AC
- Residential 14 7-14 DU/AC
- Residential 22 14-22 DU/AC
- Commercial Neighborhood
- Commercial Community
- Professional Office
- Business Park
- Light Industrial
- General Industrial
- Parks/Recreation/Natural Open Space
- Public/Semi-Public Facilities/Utilities
- Transportation Corridors
- City Boundary
- Specific Plan
- Sphere of Influence Boundary
- Planning Area Boundary

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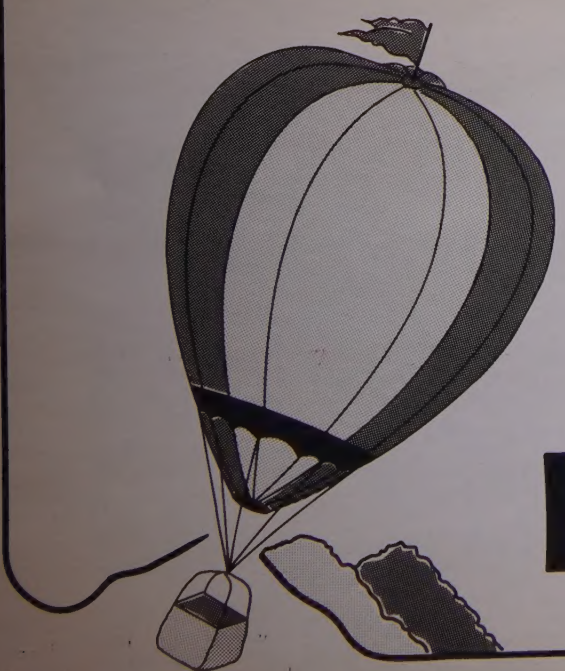
Land Use Policy Map

Adopted by Resolution
No. 2018 - October 28, 1991

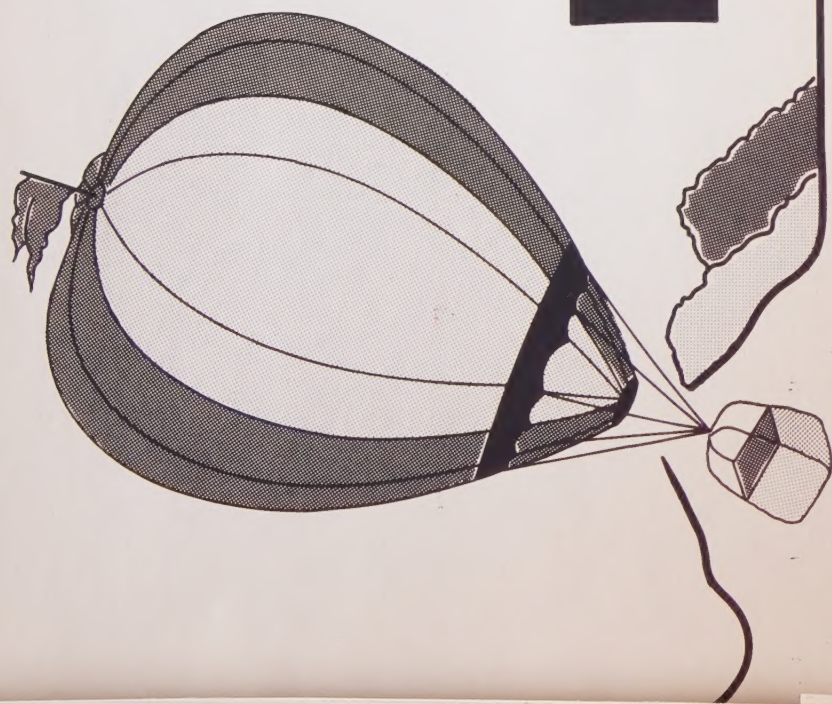
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- Specific Plan
- Sphere of Influence Boundary
- Planning Area Boundary



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THIS SIDE TO SHEETS

